The Effectiveness of Explicit Strategy Instruction on the Top Level Structure of a Text

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Abstract

Two intermediate geography classes were used to study the effects of explicit strategy instruction on the top level structure of a text. One group of Grade 7 and 8 students participated in the explicit strategy training about the top level structure of a text, while the other group used a more traditional method of questioning and answering when reading and writing. Specifically, comparisons were made between students' reading abilities, writing abilities, metacognitive awareness, standardized reading test scores and in class performance scores to see whether changes occurred as a direct result of explicit strategy training.

It was hypothesized that explicit strategy training would improve students' reading and writing abilities. At the end of the program, however, the data did not support this hypothesis. There were some significant main effects for time. The students in both groups showed improvement over time. The teacher's journal indicated that by the end of the study the students in the experimental condition had not yet mastered the strategy. Concerns about the readiness level of the students also arose from the teacher's journal.

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CHAPTER ONE: THE PROBLEM

Introduction

In this study the effectiveness of explicit strategic instruction about the top level structure of a text was explored. The study investigated whether or not intermediate students' reading and writing abilities were improved by explicit strategy instruction about the organization of the top level structure of a text. Students were taught how to identify the purpose of a passage, identify the main ideas and relate the supporting details to the main ideas. Students were taught to organize their research notes and ideas prior to writing to improve the clarity and coherence of their written work. For both tasks, the students were taught to use a discourse framework (knowledge framework) to organize their work. A discourse framework is a graphic organizer which shows the relationship between the main ideas and supporting details in a text.

Rationale

As students progress from the elementary grades to the secondary grades, the amount of expository literature they are asked to read or write increases. However, elementary students receive very little in the way of instruction about how to read and write expository literature effectively. Thus, students in secondary school often find themselves overwhelmed by the demands of a secondary school program and ill equipped to reduce their

frustration. Since almost all secondary subjects focus on expository reading and writing, elementary educators would be providing a more effective reading and writing program if they used some class time to teach students how to read and write expository text. The question investigated in this study originated from classroom experience and teaching experience. Reflection about how the students in a class were progressing on reading and writing tasks lead to the conclusion that there was a need to teach explicit strategy instruction about top level structure of text. The next question was to determine the most effective way to teach these skills to the students. This study investigated this question.

Definition of Terms

Classification - one of the Six knowledge frameworks developed by Mohan (1986). This framework is used when the purpose of the text is to define, give examples and to classify (arrange according to type or group).

Comparison - one of the Six knowledge frameworks developed by Mohan (1986). This framework is used when the purpose of the text is to find out or point out how persons or things are alike and how they differ.

Conference- a form of strategy instruction where the instructor and student or student and student discuss on a one-to-one basis any successes, concerns, problems the student may be experiencing. Productive feedback is the goal of a conference session (Pressley & Associates, 1990).

Content knowledge - information the students are being required to read, listen to or observe about a topic (Gaskins & Elliot, 1991).

Default/list strategy - the approach to reading used by poor readers. This approach is not systematic; it has no focus. The reader simply tries to remember everything about the text and lists these details. There is no attempt to interrelate these details (Meyer, Brandt & Bluth, 1980).

Describe - one of the Six knowledge structures developed by Mohan (1986). This structure is used when the purpose of the text is to tell in words how a person or object looks, feels or acts.

Discourse framework - refers to top level structure of a text.

Effective learners - learners who have a positive self-concept, take risks, preserve, strive to understand, establish purposes, plan responses, monitor progress, use relevant information, use evidence and reasoning, recognize the problem-solving process and strategies, evaluate the learning experience and transfer their learning (Schuder, 1993).

Environmental mode - a type of instructional approach some educators may use when teaching writing. This approach involves teacher-directed lessons for a brief amount of time at the beginning of each lesson. Next, the teacher acts as facilitator as the students work in small groups. Clear and specific objectives are set and materials are selected which engage the students in meaningful tasks (Hillocks, 1984).

Evaluation - one of the Six knowledge structures developed by Mohan (1986). This structure is used when the purpose of the text is to judge the worth, quality or importance.

Explicit instruction - a form of strategy teaching where the instructor provides the students with both the metacognitive knowledge about the strategy as well as information about how to carry out the strategy (Pressley & Associates, 1990).

Expository text - written passages which provide a detailed explanation (Canadian Intermediate Dictionary, 1979).

Good readers - characterized as good comprehender readers who use a structure strategy to tie together propositions and identify the author's purpose in the passage. Good readers search for the relationships between ideas in the passage. Retrieval and recall is guided by the top level structure of a text. Good readers have greater recall and comprehension abilities (Meyer, Brandt & Bluth, 1980).

Good writers - characterized as being able to move fluidly between planning, drafting, revising and setting goals. Good writers generate and organize their ideas. They focus on the purpose and meaning of a text. They develop an ongoing frame for the text using their knowledge of text structure. Good writers use a metamemorial strategy in which they recall chunks of related ideas, edit and revise these ideas (El-Dinary, Brown & Van Meter, in press; Englert & Raphael, 1988; Graham & Harris, 1989; Hillocks, 1986).

Good strategy user model - states there are five components of good strategy use. First, a good strategy user has many strategies which can be utilized. Second, the good strategy user knows the correct environment in which to apply these techniques. Third, a good strategy user understands good performance is based on effort. Fourth, good strategy users have non strategic knowledge about the world. Fifth, good strategy users have automatized the first four components and their coordination (Pressley, Borkowski & Schneider, 1987).

Integrated strategy - for the purpose of this study, this refers to the one learning strategy approach which students will be taught to use in both reading and writing tasks.

Knowledge frameworks - refer to top level structure of a text.

Knowledge telling strategy - an approach to a writing task where the writers list everything they can remember about the topic in their text. The writers do not use editing and revising techniques to improve their writing. This strategy is associated with poor writers (Englert & Raphael, 1988: Graham & Harris, 1989).

Learning strategy - an individual's approach to a task. It includes how a person thinks and acts when planning, executing and evaluating performance on a task and its outcomes (Deshler, 1991).

Mental modeling - strategy instruction which involves saying aloud to the students the various steps/decisions the instructor completes to successfully finish the task (Pressley & Associates, 1990).

Metacognitive knowledge - focuses on an individual being aware of factors that affect learning and to teach oneself to take control of one's thought processes (Gaskins & Elliot, 1991).

Metamemory strategy - a writing approach where the individual recalls chunks of related ideas. The individual edits and revises these ideas as the written text evolves. This approach is associated with good writers (Englert & Raphael, 1988; Graham & Harris, 1989).

Narrative text - written passages which tell a story, story telling (Canadian Intermediate Dictionary, 1979).

Natural process mode - a type of instructional approach some educators may use when teaching writing. The teacher acts as a facilitator, sets general objectives, encourages free writing, writing for an audience of peers, feedback from peers, opportunities to revise and reword and high levels of interactions amount the students (Hillocks, 1984).

Presentational mode - a type of instructional approach some educators may use when teaching writing. This approach has the following characteristics: specific objectives, teacher directed, set materials and a learning environment where feedback is provided only by the teacher (Hillocks, 1984).

Principles one of the Six knowledge frameworks developed by Mohan (1986). This framework is used when the purpose of the text is to explain how things act.

Poor readers - have been characterized as using a default/list strategy. Poor readers recall information from a passage in a list like collection of information. Poor readers have no focus when reading and make no attempt to interrelate ideas (Meyer, Brandt & Bluth, 1980).

Poor writers - have been characterized as spending less time in the planning stage, and at activities such as note taking, idea generation, rereading and revising. Poor writers experience difficulty in idea generation, text organization and metacognitive knowledge. They use a knowledge telling strategy, where they tell everything they know about a topic. Poor writers do not have a working knowledge of expository frameworks. Their writing is linear, non reflective and focuses on the mechanics of writing (El-Dinary, Brown & Van Meter, in press; Englert & Raphael, 1988; Graham & Harris, 1989; Hillocks, 1986).

Process knowledge - information a student learns about a strategy or skills being taught in the lesson.

Schema theory - looks at the focus of identifying the outline, synopsis, plan or scheme for the text. The theory was based on the psycholinguistic model of reading and the concepts of learning and developmental theory (Bos & Anders, 1988).

Sequence - one of the Six knowledge frameworks developed by Mohan (1986). This framework is used when the purpose of the text is to demonstrate a connected series of events.

Semantic maps - use of an organizer to graphically represent the main ideas and supporting details in a passage. Most often, the maps represent a web structure (Bos and Anders, 1988).

Strategy instruction - instruction must emphasis content knowledge, process knowledge and metacognitive knowledge. It must present authentic, meaningful tasks in a meaningful context. The instructor must motivate students to take responsibility for their learning, and encourage students to set goals, monitor and evaluate their progress (Gaskins & Elliot, 1991).

Structure strategy - a reading approach in which good readers look for patterns which tie together the propositions contained in the text, search for the author's primary thesis which binds the content to the organizational framework and search for the relationship of primary thesis and supporting details (Meyer, Brandt & Bluth, 1980).

Text structure markers - key words which explain the relationship between the ideas in a text. The markers can point out causal, temporal, contrastive and conclusive relationships in the text (Geva, 1983).

Thinking aloud - a form of strategic instruction which involves the instructor saying aloud everything he/she is thinking as the task is completed (Pressley & Associates, 1990).

Top level structure of a text - also known as discourse framework or knowledge framework. It is a strategic learning approach where graphics are used to present information on a topic and to illustrate the relationship between the facts/ ideas on a topic (Mohan, 1986).

Organization of Thesis

This thesis has been divided into five chapters and each chapter focuses on a separate section of the thesis. Chapter one outlined the problem statement, the rationale for the thesis and defined the important terms in the thesis. Chapter two reviews the relevant literature and outlines the instructional approach which was studied. Chapter three focuses on the methodology of the study. Chapter four reports the findings from the study and chapter five focuses on summarizing the results, and future implications of the study.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

Introduction

The phrase "Readers read writing, writers write reading" is one the author encountered a few years ago (Personal Communication, 1986). It is a statement which simply expresses one of the very important aspects of teaching and learning: the connection between reading and writing. It suggests that educators should teach learning strategies and skills which can be effectively used by learners in both writing and reading tasks. The purpose of this literature review is threefold. First, it will discuss the characteristics of an effective learner, an effective learning strategy and how to teach a learning strategy effectively. Second, current problems and research in reading and writing approaches will be reviewed. Last, the importance of integrating an reading and writing strategy instruction will be addressed. A strategy which focuses on teaching students to recognize, identify and utilize the top level structure of a text (i.e., knowledge discourse framework) when reading and writing will be highlighted.

Characteristics of Good Learners

Researchers have identified twelve characteristics of successful learners (Schuder, 1993). Successful learners have a positive self-concept, take risks, persevere and strive to understand. They establish purposes,

plan responses, monitor progress, use relevant information, evidence and reasoning and recognize the problem-solving process and strategies. They evaluate the learning experience and transfer their learning. Hence, Schuder (1993) concluded effective learners behave and learn strategically.

In the "Good Strategy User" model, a successful learner was described as one who possesses a variety of strategies and uses them to meet cognitive challenges (Pressley, Borkowski & Schneider, 1987). The authors identified five components of good strategy use. First, a good strategy user has many strategies which can be utilized. Second, the good strategy user knows the correct environment in which to apply these techniques. Third, a good strategy user understands that good performance is based on effort. Fourth, good strategy users have nonstrategic knowledge about the world. Fifth, good strategy users have automatized the first four components and their coordination. Using the five components, the good strategy user approaches a reading/writing task, or any other academic task, by using a variety of strategies, which vary in complexity. For example, during prereading the good strategy user would activate his or her relevant knowledge about the passage and make predictions about the text content. During reading, the strategies of self-monitoring or mental imagery may be used. After reading, the learner may make a summary of the text or engage in question answering (Pressley & Associates, 1990). Thus, when a good strategy user

confronts a task, the task is evaluated, possible strategies are evaluated for effectiveness and a plan is implemented.

What is a Learning Strategy

A strategy has been defined as an individual's approach to a task. It includes how a person thinks and acts when planning, executing and evaluating the performance of a task and its outcomes (Deshler, 1991). The strategies instruction approach is one way of selecting, delivering and organizing the curriculum. Instruction focuses on teaching students how to carry out strategies related to skills (e.g., reading and writing) and to use knowledge to meet the demands and challenges of both school and out-of-school activities (Deshler, 1991).

During the past few decades there has been substantial research about the necessary characteristics of an effective learning strategy (Deshler & Schumaker, 1986; Gaskins & Elliot, 1991; Schuder, 1993). A learning strategy is successful if it enables students to successfully analyze and solve new problems in both an academic and nonacademic setting. The strategy must be able to be generalized over many situations and over time (Deshler & Schumaker, 1986).

During the initial stages of strategy instruction, the lessons are teacher directed. The teacher models the chosen strategy through "think alouds" and reflects on the strategy's importance. Eventually, the students

should be able to apply the strategy independently and be able to generalize its use appropriately. A continuum of strategy knowledge and skill exist, with the end goal being the independent use of the strategy by the students.

Need to Teach Learning Strategies to Promote Effective Learners

Research into the characteristics of effective learners suggests capable learners learn strategically. Students who are taught learning, thinking and problem-solving strategies tend to perform better than their counterparts who receive no strategy instruction (Gaskins & Elliot, 1991). The strategic approach involves teaching students both content and the processes involved in the learning. For example, a strategy which could be taught students when preparing for a content test on a subject is Read, Cover, Recite and Check (RCRC). The students are taught to read, cover, recite and check the material they are studying to ensure they can remember all of the important details. Thus, educators must acknowledge the importance of strategic instruction and incorporate strategy instruction in a meaningful way into their classroom activities (Gaskins & Elliot, 1991).

How to Teach a Learning Strategy

Recently a number of instructional models have been developed to assist educators effectively teach learning strategies. Fortunately, all of the recent models of how to teach a learning strategy (e.g., Strategies

Intervention Model by Deshler & Schumaker, 1986; Benchmark Model by Gaskins & Elliot, 1991; and Students Achieving Independent Learning Model by Schuder, 1993) share similar instructional features.

The teacher must emphasize the content knowledge, process knowledge and metacognitive knowledge of each lesson. All three elements should be present in a lesson, but the amount of time for each objective will vary across lessons. The content knowledge is the knowledge students are being required to read, to listen or observe. The process component is the strategy or skills being taught during the lesson. The metacognitive/ motivational component focuses on developing the students' awareness of factors that affect learning and teaching them to take control of their thought processes. Teachers who are introducing a strategy for the first time will generally spend a greater amount of class time promoting students' awareness of the cognitive/metacognitive strategy.

As learning progresses, instruction regarding the strategy will decrease and the amount of time spent on teaching content will increase (Gaskins & Elliot, 1991). Teachers whose goal is to effectively implement strategy instruction must present authentic meaningful tasks in a meaningful context. The teachers' role is to motivate students to take responsibility for their learning. Students must be encouraged to set goals, monitor and evaluate their progress.

While actually teaching students a learning strategy, teachers need to use mental modeling (scaffolding), thinking aloud, conferencing, corrective and positive feedback as part of the instruction (Gaskins & Elliot, 1991). It is important that teachers explicitly state the rationale for the strategy (Gaskins & Elliott). It is imperative that teachers must teach students why it is helpful to learn the strategy and when and where the strategy can be used. Students should be taught what/how to carry out the strategy. It is important for teachers to share their personal experience of strategy use with the students. A regular review of the key instructional points and monitoring of the students' performance is essential. Through regular practice, students are encouraged to master the strategy and to generalize its use. Periodic probes can be utilized by the teachers to evaluate the students' level of proficiency and generalization (Gaskins & Elliot, 1991).

One structured methodology for teaching strategies has been developed and outlined by Deshler and Schumaker (1986). This is just one of the possible methodologies, but it presents a concise step-by-step outline of how to effectively teach learning strategies. The first step is to test the students' current learning abilities for the task in question. The second step is to conference with the students to allow the students to recognize their strengths and weaknesses. During the third step, the students must commit to learning the new strategy. The students must be motivated and understand how this strategy will aid them. The fourth step is to describe

the new strategy. The rationale, the expected results and the specific use of the strategy must be explained. The fifth step involves the students setting goals for the learning of the strategy. The sixth step is to model the new strategy. Modeling the new strategy involves the teacher (presenter) thinking aloud through the strategy. The seventh step progresses to involving the students in the demonstration of the strategy. In the eighth step the students verbally rehearse the strategy. The ninth step involves having the students practice the new strategy in a controlled environment with controlled materials. The tenth step involves the students practicing the strategy to achieve mastery. Reinforcement and corrective feedback are used to aid the students in obtaining mastery. The final step is a posttest which tests the students' ability to utilize the strategy outside of the controlled environment (Deshler & Schumaker, 1986).

Explicit Instruction

Explicit instruction involves educators providing students with both metacognitive knowledge about the strategy as well as information about how to carry out the strategy. Teachers may model strategy use thinking aloud the decisions they make as they progress through a learning task. For example, if a lesson on summarization is being taught, the teacher may verbalize questions of this nature: Did I identify all the main information? Did I delete all the trivial information? and, Did I relate the main

information to the supporting information? The teacher would also think aloud about some of ways the summary could be evaluated. For example, the teacher could model how students should learn to read over the completed summary and conclude whether they understand and could explain the summary's main ideas, supporting details and how they relate to a peer effectively.

Research has shown there is a need for teachers to communicate strategy rationale to students. It is important for teachers to explain why the task/objectives are important. The students need to know when and where to use various strategies. This information needs to be explicitly explained to students (Pressley & Associates, 1990). Research suggested if the students believe the objective is of value, they will be more motivated to learn and use the strategy (Gaskins & Elliot, 1991). In addition, providing metacognitive information about the strategy plays a critical role in the students' ability to generalize and maintain the strategy. Therefore, the more information students possess about a strategy, the more motivated they will be to utilize and generalize the strategy in an effective manner.

Importance of Reading and Writing

Reading and writing are two of the most fundamental academic skills in our society. These two skills are an important element in every academic subject which is taught at school. Therefore, a learner who possesses capable

reading and writing skills is more likely to be a successful student. Academic success is often based on students' levels of reading and writing competency. Reading and writing skills are used in simple every day activities such as reading a newspaper to more celebratory events such as writing a congratulations speech for a wedding. Beyond the world of education, individuals utilize their reading and writing skills to efficiently manage their lives. This is one of the main reasons why educators and researchers strive to develop and create the most effective reading and writing programs possible.

Good versus Poor Readers

Recent research has allowed educators to acquire insight about the comprehension skills demonstrated by good and poor readers. This insight aids educators in planning and implementing the most effective reading program.

For example, research investigating students' ability to conceptualize the top level structure of a text, or to develop a knowledge discourse framework of the author's organization of the text, suggested that teachers should teach students how to identify and use an author's organization in prose to increase retention. Meyer, Brandt and Bluth (1980) hypothesized that good readers use a structure strategy for comprehension. Specifically, they hypothesized that good readers look for patterns which tie together the

propositions contained in the text. Good readers search for the author's primary thesis which binds the content to the organizational framework or schema, and look for the relationship of the primary thesis and supporting details. Finally, good readers were expected to use the top level structure to identify the relationships between the ideas in the passage to guide their retrieval (Meyer, Brandt & Bluth, 1980).

Poor readers were hypothesized to use the default /list strategy. Unlike the structure strategy, the default/list strategy is not systematic. Readers using this strategy were expected to have no focus, but simply attempt to remember everything about the text. These students were expected to make a list-like collection of descriptions about the passage, making no attempt to interrelate these items. Thus, their recall resembled a list-like description from the text (Meyer, Brandt & Bluth, 1980).

The results from Meyer, Brandt and Bluth's study supported these hypotheses. Good readers did use the top level structure of the text. They could effectively identify and interrelate the main ideas and supporting details of the text. These readers could recall more information about the original passages both immediately and after a one-week delay than poor readers who did not use the top level structure of the text. Instead, poor readers listed the items recalled from the passages as they read (Meyer, Brandt & Bluth, 1980).

A study carried out by Taylor suggested similar results. Taylor (1980) examined the use of top level text structure by fourth grade students, sixth Grade students and adults. She examined the ability of readers at different ages to use discourse frameworks (i.e., top level structures). The results from this study showed good readers did use top level structures. Also, the older the individual, the greater the chance of a top level structure being used. Taylor summarized that young children, due to less prior knowledge, skill at exposition, skill at mnemonics, study strategies and ability to express themselves verbally, may have not yet developed knowledge about top level structure (Taylor, 1980). Taylor's work supported the conclusions suggested by Meyer et al (1980). Students who are able to use top level structures from a text demonstrate better comprehension and recall than those who do not possess such knowledge.

Effective Reading Strategies

Effective reading strategies focus on many different levels of reading. Some strategies focus on developing students' ability to decode, whereas others focus on predicting and previewing, and still other strategies focus on developing the top level structure knowledge of a reading text. The following section will focus only on those strategies which have been developed to educate students about the top level structure of a text. The study will further narrow its focus by discussing research with expository texts only.

Expository texts are texts designed to explain, describe, evaluate and define knowledge. Alternately, narrative texts are literature based including short stories and novels. Narrative text involves story telling (Avis, Gregg, Neufeldt & Scargill, 1979).

Geva (1983) researched the use of flowcharting to improve the reading comprehension of students with reading difficulties. The subjects' reading abilities were determined by their scores on the Nelson Denny comprehension scale. Two classes were developed, dividing the students into a low score and higher score class. Students' scores on the Nelson Denny pretest ranged from the 9th percentile in the low score class to the 64th percentile in the higher score class. Geva designed flowcharts to aid students in recognizing text structure and text structure markers. Text structure markers are key words which explain the relationship between the ideas in the text. Text structure markers point out causal relationships (e.g., since, because, due to), temporal relationships (e.g., first, next, then), contrastive relationships (e.g., however, on the other hand), conclusions (e.g., in conclusion, to sum up) and examples (e.g., for example, for instance).

Subjects in Geva's study were students from two community colleges. In the training condition, the students used expository texts based on college journals. Students were taught to identify the function of the text. Specifically, the students were taught to identify conjunctions and the

associated logical-structural implications. Towards the end of the study, students were asked to graph out paragraphs using flowcharts.

Students in the control condition were exposed to the skills of speed reading, skimming and identifying conjunctions in a text. These students worked through the program at their own pace. Overall, the findings suggested that instruction about flowcharting improved the reading abilities of the students. Geva suggested teachers may improve students' comprehension of expository text by integrating instruction about content with explicit instruction about the logical structure of a text (Geva, 1982). An example of paragraph flowcharting as outlined by Geva is shown in Figure 1.

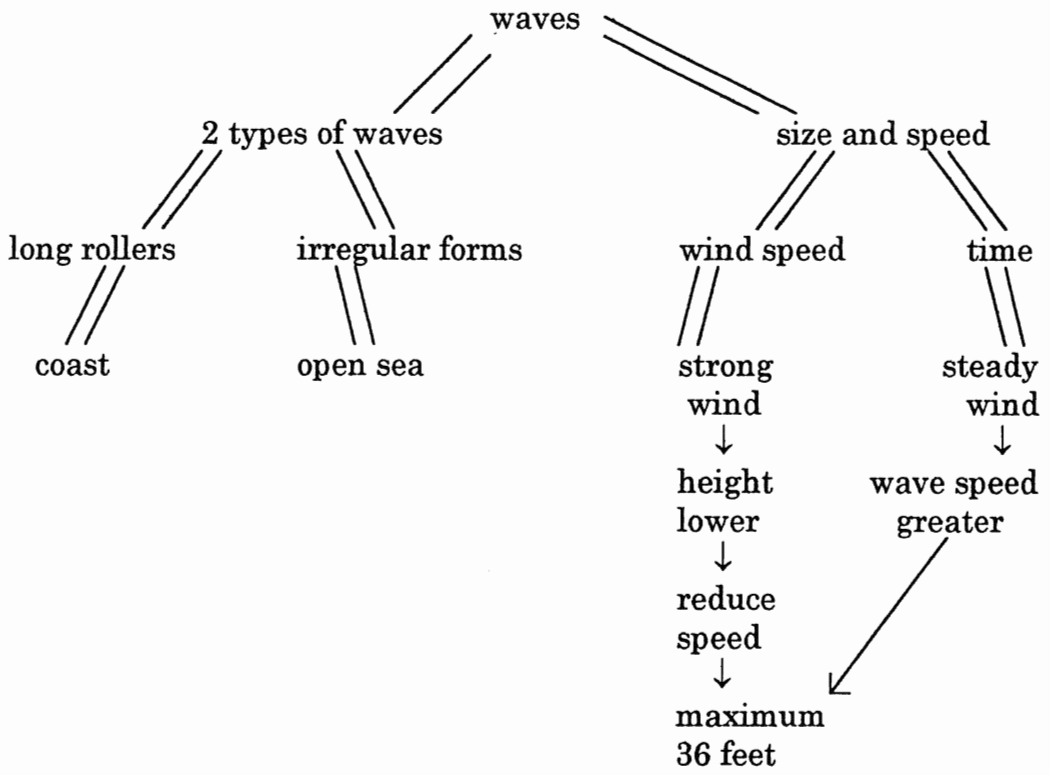
Bos and Anders (1988) completed a study and concluded that students could become more effective readers if they were taught to use an interactive strategy prior to reading. When students enter secondary school, greater demands are placed on higher level thinking skills. Subject-orientated teachers tend to focus on the content knowledge to be learned, with the students expected to implicitly acquire strategies necessary to learn this information.

Bos and Anders developed an interactive model for teaching content area concepts. Their interactive model was based on schema theory, a psycholinguistic model of reading and the concepts of learning and developmental theory. An essential element of this interactive model is to

utilize some type of graphic organizer when reading. Two examples of graphic organizers used by Bos and Anders were relationship charts and semantic maps. These visual representations provided the students with a means of organizing the ideas and with a summary to which they could refer both during and after reading. The graphic organizer provided the students with a means of organizing text ideas, creating meaning and improving comprehension (Bos & Anders, 1988).

Waves are caused, as nearly everyone knows by the wind. Two classes of waves may be distinguished: the long rollers at the coast, and the far more irregular forms of the open sear, where waves of all sizes and types are present. The size and speed of waves depends not only on the wind's speed but on the length of time the wind has been blowing, and the unbroken stretch of water over which it blows as well. Very strong winds tend to beat down the waves' height and to reduce wave speed. on the other hand, less violent but steady winds often produce wave speed greater than that of the wind itself. The average maximum wave length is about 36 feet, although occasional higher waves have been measured.

One student's representation of the "waves" text



topic . . . . .
elaboration ======
cause-effect →
process __ __ __
example _____
detail __ _ __ _ __ _
conclusion ⇒

Figure 1. "What causes waves?" text

Bos and Anders compared the learning performances of junior high school students with reading disabilities instructed to use semantic mapping or semantic feature analysis to students with learning disabilities who participated in a program which focused on definitional instruction. Interactive instruction resulted in higher performances in reading than definitional instruction (Bos & Anders., 1988). Thus the results of this study reinforced Geva's findings. Both studies concluded it is essential for educators to teach reading strategies which educate students about the top level structure of a text.

Good versus Poor Writers

Contemporary studies have developed a list of attributes which typically describe good writers and a list of attributes which typically describe poor writers. Good writers are able to move fluidly between the stages of planning, drafting, revising and goal setting. Good writers generate and organize their ideas. They focus on the purpose and the meaning of their text. Good writers develop an ongoing framework for their text. Thus, they use their knowledge of discourse schemata to develop their text. Good writers are able to evaluate which information is most appropriate to include and where that information will fit best. Good writers have been characterized as utilizing a metamemory strategy which involves recalling chunks of related ideas, editing and revising the ideas (El-Dinary, Brown &

Van Meter, in press; Englert & Raphael, 1988; Graham & Harris, 1989; Hillocks, 1986).

Immature writers or poor writers spend less time in the planning stage, and spend less time on activities such as notetaking, idea generation, rereading and revising. Immature writers experience difficulty in idea generation, text organization and metacognitive knowledge. Poor writers typically do not have a working knowledge of expository frameworks. Their written work is linear and nonreflective. Poor writers focus on the mechanics of writing. Poor writers have been characterized as using a knowledge-telling strategy in which they tell everything they know about a topic (El-Dinary, Brown & Van Meter, in press; Englert & Raphael, 1988; Graham & Harris, 1989; Hillocks, 1986).

Effective Writing Strategies

Hillocks (1984) researched three different modes of presentation for the teaching of composition. The three modes he discussed were the natural process mode, the environmental mode and the presentational mode. The presentational mode has the following characteristics: specific objectives, teacher directed, set materials and an environment where feedback is provided only by the teacher. In the natural process mode, the teacher is a facilitator. The teacher sets general objectives, encourages free writing, writing for an audience of peers, feedback from peers, opportunities to revise

and reword and high levels of interaction among students. The environmental model involves teacher-directed lessons for brief amounts of time at the beginning of each lesson. Next, the teacher acts as a facilitator as the students work in small groups. In the environmental mode, clear and specific objectives are set and materials are selected to engage students in meaningful tasks related to class objectives. The activities are problem centered and occur in small groups to encourage high levels of interaction.

Hillocks concluded the most effective mode of presentation was the environmental mode. In this mode, the teacher, the student and the material work together to teach new writing skills. In this mode the students are highly involved in the writing process. The teacher plans and uses activities to encourage this high level of involvement. Hillocks acknowledged that his conclusions contradicted current thinking that free writing, and the natural process mode is the most effective method for teaching composition. He stressed that effective writing composition can be most successfully taught through the systematic use of instructional techniques (strategies) in a meaningful environment. Strategies designed to aid immature writers in developing the skills they need to become good writers are highly valuable (e.g., notetaking, brainstorming, rereading and revising). For example, students could be given a series of questions arranged on a think sheet to aid them in their writing organization, -- questions such as: Who am I writing

for? Why am I writing this? What do I know? How can I group my ideas? (Pressley & Associates, 1990).

A recent study investigated the difficulties students with learning disabilities experience with respect to writing compositions supported the concept of making students aware of the top level text structure of a passage (Graham & Harris, 1989). The Graham and Harris study recognized the students with learning disabilities frequently failed to include critical elements such as how the story ends or provided a conclusion for an essay in their writing. Graham and Harris outlined a strategy they developed to teach effective composition. The strategy was designed to teach the students how to generate, frame, and plan a text. The students were taught to consider their audience and to develop a plan for what they intended to say (discourse framework).

The subjects involved in this study were three sixth grade learning disabled students. A trained graduate student was the instructor for the study. Each student met with the instructor on a one-to-one basis. Strategies were explicitly and overtly modeled in context. The goals and the significance of the strategies were made clear. Training was criterion based in that students do not progress to the next level of instruction until mastery had been reached. The strategies taught were composition strategies. An example of one composition strategy is: 1) Think, who will read this, and why am I writing this? 2) Plan what to say using tree? (topic sentence, note

reasons, examine reasons, note ending). 3) Write and say more. Strategy instruction followed the principles of effective strategy instruction. The training resulted in a positive change in the number of functional elements student included in their essays. The essays written following training were judged to be qualitatively superior to those written prior to training. The results of the study suggested this was an effective strategy which increased the writing ability and self-confidence of the students involved. The results suggest the more strategic knowledge students possess about the top level structure of text, the more capable their writing skills (Graham & Harris, 1989).

Importance of Integrating Effective Reading and Writing Strategies

Although reading and writing have been identified as different skills, they share common cognitive processes. Thus, to study only one, is to overlook the shared characteristics of the two. A review of current research supports the need for the development of a common strategy which will enable students of all ages to become more effective readers and writers. This strategy should address the structure level or organizational level of text. Reading research suggested the need to develop strategies which enable students to become more effective at utilizing the top level structure of a text to improve comprehension and recall. Writing research suggested the need to develop strategies which enable students to organize their

compositions using top level structures to improve clarity and coherence. Furthermore, students will need explicit instruction to develop these strategies.

Review of Existing Research Studies Based on Integrating Reading and Writing Strategy

The concept of teaching an integrated reading and writing strategy has not been extensively studied. However, those studies which have been conducted have had promising results. Pressley, Gaskins, Schuder and Almasi (1992) focused on the effectiveness of teaching students to look for descriptions, cause and effect and time sequences in the text and how to represent these relations by constructing maps that capture the description and sequences specified in the text. Students were taught text analysis strategies in conjunction with comprehension strategies. Also, the students were instructed on how to use their maps to write more effectively. In addition, the strategy use was generalized over several subject areas such as language arts, social studies and science. one conclusion which resulted from the study was students were successful at learning to construct and use semantic maps as part of their reading and writing (Pressley, Gaskins, Schuder & Almasi, 1992).

A study carried out by Margaret Early (1990) set out to determine the best way to develop students' knowledge about subject matter and cognitive

capabilities to become better readers and writers. Early stated that the seeds of exposition which appear in the children's early writings go unrecognized and undeveloped by teachers who have been led to value and to recognize narrative alone and/or to believe that young children are unable to cope with the cognitive demands of exposition. Early believed that if educators expanded, enriched and developed young students' abilities to write in the expository form, much of the writing difficulties experienced by intermediate and senior students would be avoided. Early based her strategic approach on the knowledge frameworks taught by Mohan (1986).

Early concluded that teachers who worked with junior students were able to build materials around the organizing knowledge frameworks. Hence, good language learning can be integrated with good content learning, and the knowledge frameworks were successfully utilized in both reading and writing tasks (Early, 1990).

The integrated strategic approach for teaching reading and writing tasks was also supported by Washington (1988). Specifically, Washington supported the strategic approach of teaching semantic mapping to students with learning disabilities. Semantic mapping is a process of organizing information by categories which help students to graphically relate words and ideas to one other. In this approach, learning is facilitated by the teacher modeling the reading/thinking/writing process. Washington taught students to recognize the main ideas, supporting details, draw conclusions

and to generalize through the use of semantic mapping. Eventually, students were taught to utilize the semantic maps to develop paragraphs. Hence, the goal of this form of semantic mapping was to provide a model, a to be followed when students were reading a passage and writing a report on that passage. The study's results suggested this approach was successful in aiding students to improve their reading and writing skills (Washington, 1988).

Research on investigating integrating reading and writing strategy is very limited. More often, the studies conducted have focused on either reading or writing, but not the two tasks integrated.

Summary of Literature Review

Successful learners are able to utilize effective learning strategies. They are able to identify and manipulate the top levels structure of a text. Most often, these effective readers and writers have learned these processes implicitly, since traditional educational programs rarely focus on explicitly teaching the top level structure of a text and its function. Although, research on reading and writing strategies suggested that such explicit instruction aids students in becoming effective readers and writers. However, most of this research has not linked top level strategy instruction to both reading and writing tasks. Inasmuch as skill at both reading and writing is essential to academic success tasks, an effective learning strategy that can be generalized

over both reading and writing tasks will aid students in becoming more effective learners.

An Integrated Reading and Writing Strategy

Young learners communicate their ideas through oral capabilities long before they are able to read print or express their ideas in print. Young learners have demonstrated a knowledge base for both narrative stories and expository text. An initial approach to teaching top level structures to students, especially young students, is to model through verbal discussions. The teacher verbalizes the structure behind both narrative and expository text. This verbalization will occur at the same time as the students are being immersed in the world of print.

Westby (1985) completed a study outlining the importance of using talk about literature to bridge the transition from oral to print formats. Westby believed it is important to discuss, identify and pictorially symbolize the parts within narratives and expositions. For example, the teacher discussed the important elements of the expository text and the different functions of the text. Adults recognize the presence of these elements and how they work together, but young children are often unaware of the internal structure. Young students can be made aware of the structural elements of a text through teacher talk about the text. Hence, young learners need to be taught the elements required for expository reading and writing, and they

must be taught how these elements are sequenced to effectively communicate ideas (Westby, 1985).

As students progress through the school system, visual discourse frameworks can be presented verbally and visually to aid students in identifying the top level structures of a text. Mohan (1986) has focused on developing teachable frameworks. Although the focus was on expository forms, Mohan's frameworks have been applied to narrative and expository literature. Mohan suggested all expository topics or content can be broken down into Six major knowledge frameworks. The Six types of knowledge frameworks are classification, comparison, sequence, describe, principles and evaluation. Each framework has specific thinking skills, specific functions, features and key visuals associated with it (Mohan, 1986). Further elaboration for each framework is outlined in Figure 2.

The knowledge structure of classification addresses the thinking skills of classifying, defining, understanding, applying and developing concepts. Figure 3 is an example of the classification knowledge structure.

The comparison knowledge structure addresses the thinking skills of observing, identifying, labeling, locating, describing, comparing and contrasting. Figure 4 is an example of description knowledge structure.

The sequence knowledge structure is addressed as processing information to arrange events in order, note changes over time, follow

directions, note cycles and processes. Figure 5 is an example of sequence knowledge structure.

The describe knowledge structure addresses making decisions, selecting, proposing alternative solutions, solving problems and forming personal opinions. Figure 6 is an example of choice knowledge structure.

The principles knowledge structure addresses explaining and predicting, interpreting data, drawing conclusions, formulating, testing, establishing hypotheses, understanding, applying cause, effecting meaning and rules. Figure 7 is an example of the principles knowledge structure.

The evaluation knowledge structure addresses evaluating, ranking, appreciating, judging and criticizing. Figure 8 is an example of the evaluation knowledge structure.

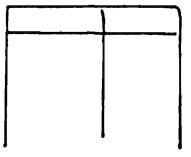
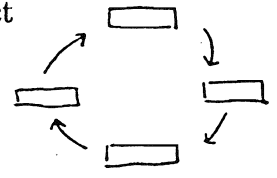
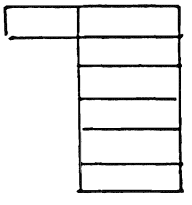
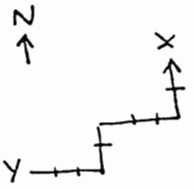
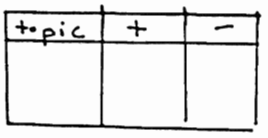
Function	Key Visual	Features of Text	Thinking Skills
Classification Definition Exemplication		there are ... types, kinds those which ... for instance, example	classifying defining using operational decisions understanding applying or developing concepts definitions
Comparison Contrast		on the one/other hand whereas, but more/less than	observing identifying recognizing labeling naming locating describing comparing contrasting
Sequence Cause/Effect Cycle Process Hypothesis		first, next, after that ... when (plus sub clause) so, therefore because ... as a result of if .... then	arranging events in order noting changes over time predicting following directions planning procedures explain and predict interpret data/draw
Describe List features		first, secondly	making decisions selecting identifying issues recognizing problems generating solutions identifying alternatives solving problems

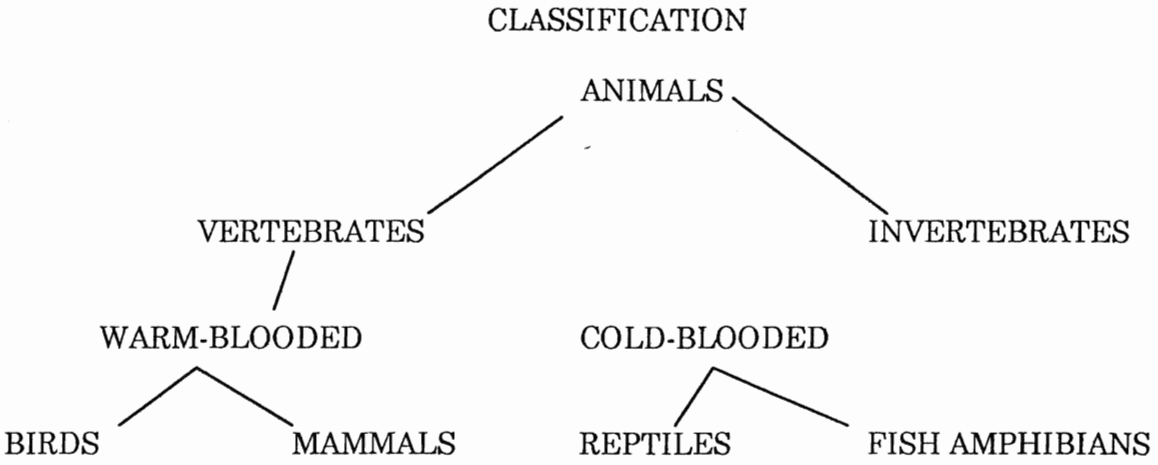
Figure 2. Knowledge frameworks/discourse shapes

(Figure 2 continued)

Principles place direction spatial relations route parts/whole	diagram map route  	propositions of place, location relocation, etc.	conclusions formulate, test hypotheses understanding, applying and developing generalizations cause, effects, means, ends, motives, reasons, rules, norms, strategies, methods techniques, impacts responses
Evaluation	rating chart grid mark book  		evaluating, ranking appreciating, judging and criticizing, forming expressing and justifying preferences and personal opinions understanding, analyzing, deciding goals

Paragraph: You can divide animals in two ways - vertebrate and invertebrates. Vertebrates means they have no backbones. Under vertebrates are warm-blooded and cold-blooded. Invertebrates means they have no backbones. Under warm-blooded are mammals and birds because they are warm-blooded. Under cold-blooded are reptiles, fish and amphibians because they are cold-blooded. You can say fish are cold-blooded animals which have backbones. They belong to the same vertebrate groups as reptiles.

Classification Knowledge Structure



(Early, 1990)

Figure 3. Classification knowledge structure

Paragraph: Grammar and usage are not the same, though the terms are often used interchangeably. A grammar is a system of general principles and particular rules for speaking and writing a language. It seeks to describe the forms, structure, and arrangement of words in the language. Sometimes the word "grammar" refers simply to any forms that people use in their speaking and writing. In this sense, it is merely descriptive of a pattern, whereas usage refers to the choice of words that has been established within a given grammatical structure. Usage is determined by such factors as geography, socioeconomic level and the formality of the situation. Thus when a Southerner asks, "Would you all like to come for dinner?" "you all" is a way of using the words in the language. It has nothing to do with the grammar of the language. Consider grammar as the basic structure of the language and usage as the differing details within that structure.

Comparison Knowledge Structure

GRAMMAR	USAGE
- system of general principles and rules - forms people use in speaking and writing - describe forms, structure and arrangement of words - descriptive of pattern - basic structure	- refers to choice of words - influenced by geography, socio-economic level and formality of situation differing details within that structure

Figure 4. Comparison knowledge structure

Paragraph: By becoming more aware of changing curricular expectations, educators can be prepared to observe mismatches between expectations and a student's ability to successfully make crucial shifts during the school years. The changing demands of the curriculum from preschool through high school have been described. During preschool, programming focuses on sensorimotor, language, social and emotional growth. In the early Grades (K-2) there is a shift to the development of perceptual cognitive strategies prior to teaching basic academic skills. During the middle years (Grades 3-4) greater demand is placed on the child's linguistic and symbolic language skills. Teaching shifts to content areas; basic skills are reviewed but no longer directly instructed. Curriculum focuses on concrete operational thinking. In upper elementary school (Grades 5-6) there is even greater emphasis on content areas. Students are expected to recall information and to display fluency in all basic academic skills. Formal operational thought is developed.

Sequence knowledge Structure

First - preschool, focus on sensorimotor, language, and social, emotional growth

↓

Second - early Grades (K-2) perceptual-cognitive strategies

↓

Third - middle years (Grades 3-4) focus on child's linguistic and symbolic language skills

↓

Fourth - upper elementary school (Grades 5-6) emphasis on content areas, recall information, display fluency in basic academic skills formal operational thought

Figure 5. Sequence knowledge structure

Paragraph: A spreadsheet is like an electronic version of a paper worksheet that performs numeric calculations automatically. Spreadsheets are generally used to calculate financial data, although they can also be used to calculate and analyze mathematical and scientific data as well. Spreadsheets are most commonly used for tasks such as budgets, balance sheets, income statements, and sales forecasts. A spreadsheet is arranged in rows and columns, just like a paper worksheet. In each cell, you enter text, numbers or formulas. Text describes the data in each row or column, numbers represent the raw data, and formulas perform the calculations specify. When you change a number in a formula the spreadsheet automatically recalculates the correct result. You can create your own formulas, or you can use special formulas called functions. Functions are designed to perform a specific type of calculations, such as computing the monthly payment amount for a loan.

Describe Knowledge Structure

Spreadsheet

- electronic version of paper worksheet
- calculations automatically
- used for financial, mathematical or scientific data
- tasks such as budgets, balance sheets, income statements and sales forecasts
- arranged in rows and columns
- enter text, numbers of formulas in cells
- change number, automatically recalculates
- create own formulas (i.e., special functions)
- functions perform specific type of calculation

Figure 6. Describe knowledge structure

Paragraph: Our solar system consists of one star, a family of nine planets, at least 53 moons, thousands of asteroids and billions of meteroids and comets. The terrestrial planets, Mercury, Venus, Earth, the moon and Mars are composed of mostly rocky materials. The outer planets, Jupiter, Saturn, Uranus and Neptune are much larger, are composed mostly of gas, and have no solid wastes. Pluto and Charon and the satellites in the outer system are composed of mostly ice. Some are so cold that they have methane ice or nitrogen ice at their surface. All the planetary in the solar system are important in the study of the Earth because their composition, surface features and other characteristics show how planetary bodies in our solar system evolved and provide insight into the forces that shaped our history.

Principles Knowledge Structure

Our Solar System

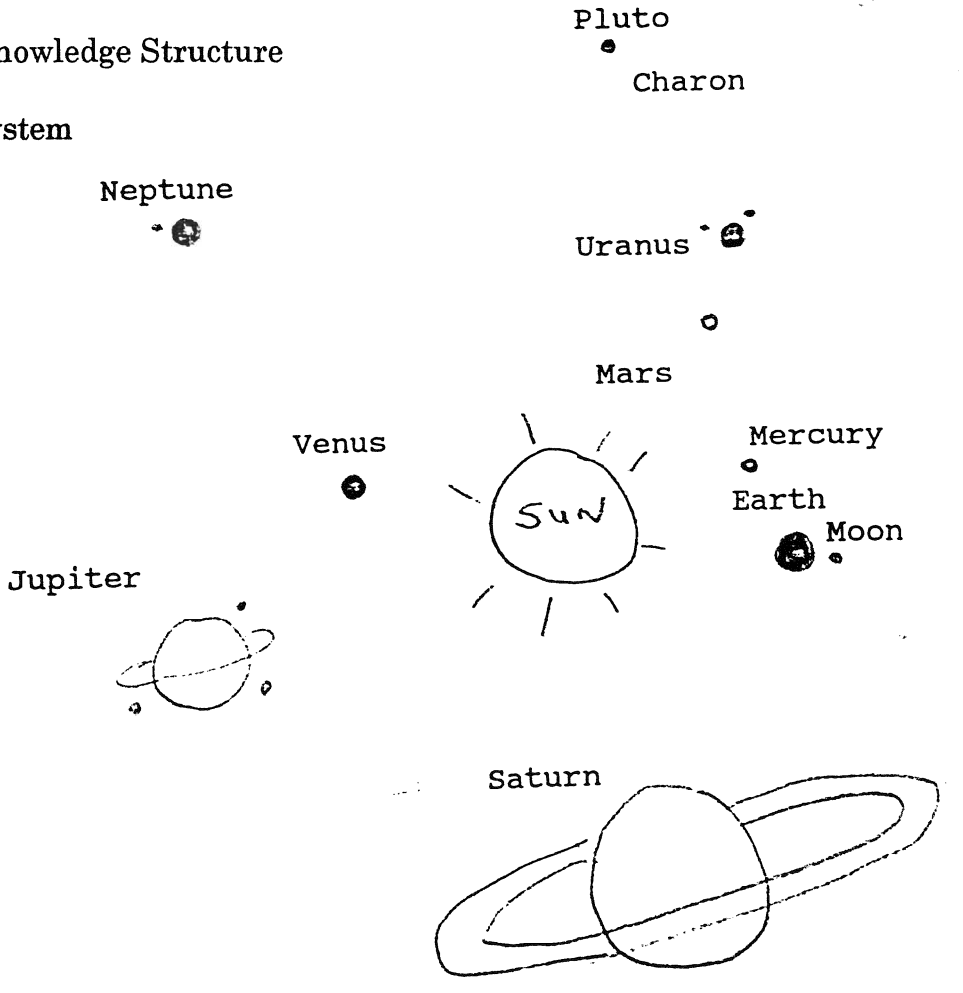


Figure 7. Principles knowledge structure

Paragraph: Teaching Grammar: Yes, No, Maybe

The study of grammar has its roots in ancient times. The Greeks thought it valuable in the teaching of poetry. The rules of English grammar are derived primarily from Latin, the language of Romans. Throughout the Middle Ages grammar retained its place in the curriculum; and when elementary schools were first established in this country, the study of grammar was central. In fact, many adults may still refer to their early education as "grammar school." "Why then," they may ask, "has the teaching of grammar taken a back seat in the curriculum? Isn't it possible that more grammar instruction will right some of the wrongs that exist in contemporary education and help Johnnie write better?" Our answers can only be that, for many, many years (at least since 1903), research studies have shown that the teaching of grammar does not improve speaking or writing. Learning about the structure of a language does not help a child use the language more effectively. Is it defensible therefore to continue teaching traditional grammar simply because it has always been taught? It is not that grammar is being discarded, it is being approached from different vantage points. Instruction is becoming more eclectic, selecting what is most appropriate for individual students and situations from each of the three kinds of grammars.

Evaluation Knowledge Structure
Rating Chart: Teach Grammar, Yes, No, Maybe

YES	NO	MAYBE
tradition always been taught	- does not improve reading or writing - does not help child use language	- approach from different vantage points - instruction

Figure 8. Evaluation knowledge structure

Outline of Present Study and Rationale

The intent of this study was to investigate the effectiveness of explicit strategy instruction about the top level structure of a text for intermediate students. It was expected that students in the explicit strategy instruction condition will achieve greater reading, writing and metacognitive scores than control students who received a more traditional form of instruction.

The methodology used was quasiexperimental, with students from two classrooms assigned to an experimental and control groups. Pretest and posttest measures were recorded for each group. The dependent measures were established and recorded for each group. The dependent measures for the pretest and posttest were reading recall/comprehension test, writing passage test, metacognitive tests (to assess what students were thinking when performing reading/writing tasks), a standardized reading comprehension test (Gates-MacGinitie, 1992) and in-class performance scores (derived from the students' unit tests, assignments and research projects).

The study was carried out during the regular intermediate geography periods. The instructional materials were based on the geography guidelines as outlined in the Peel Board of Education Curriculum Guidelines. The major theme for the year was cultural geography, with both the control and experimental group receiving three classes per week. Both the control and the experimental group covered the same materials, with the only difference being the format of instruction.

The students in the experimental group received explicit strategy instruction about the top level structure of text and how they could become more effective readers and writers by recognizing and using the this structure. The teacher relied on the various models developed by Deshler & Schumaker (1986) and Gaskins & Elliot (1991) as a guide to effective classroom strategy instruction. various techniques such as "think aloud," modeling, providing rationale, repeated practice, frequent probes were used throughout the instructional period. At the beginning of top level text instruction, the focus of the lessons was strategy instruction but, as the students progressed in their abilities to use this strategy, the focus shifted towards content knowledge. The posttest measures was collected after approximately fifteen weeks of explicit strategy instruction.

The control group used the same material and were responsible for the same academic requirements as the students in the strategy condition. A more traditional method of questioning and answering when reading and writing was used. The students were asked to read the passage and answer questions based upon the passage. The questions were content questions and originated from the textbook or the instructor. For writing tasks, the students followed the writing process. Pretest measures were collected at the beginning of the study. The posttest measures were collected after approximately fifteen weeks of instruction.

CHAPTER THREE: METHODOLOGY AND PROCEDURES

Overview

The intent of this study was to investigate the effectiveness of explicitly teaching intermediate students a reading/writing strategy which required them to identify and utilize the top level structure of a text through explicit instruction. It was expected that explicit strategic instruction about the top level structure of text would result in greater improvement in students' reading and writing abilities versus a more traditional approach to reading and writing instruction where students answer content questions and follow the writing process.

Students from two classes were assigned to either an experimental or control condition. This created two groups consisting of students from Grade 7, Grade 8 and an intermediate communications class were. Each class had the same instructor. One of the most important independent measures for the study was to assess the students' progress in their class work, such as assignments, research projects and tests. It would not be possible to use this measure if two instructors were involved in the study because tests, assignments and projects should reflect the learning which has taken place in the class. Thus, two instructors would have had to administer two different tests or assigned different projects and a comparison could not have been drawn.

Pretest and posttest measures for the experimental and control group were gathered. The experimental group received explicit strategy instruction and the control group received a more traditional form of instruction. Both groups covered the same academic material and were responsible for the same unit tests, assignments and research projects. This chapter outlines the subjects, instructional materials, treatment and control programs, procedures and the method of data analysis.

Methodology

The methodology was a quasiexperimental design in which pretest and posttest measures were attained for both an experimental and a control group. The statistical analysis was a comparison between the experimental and control group on the pretest and posttest measures.

Subjects

Subjects were selected from two classrooms (one split Grade 7 and 8 class and one intermediate communications class) at the same school. At the beginning of the study there were 36 students in the study, 18 students in the experimental condition and 18 students in the control condition. In the experimental group, there were 5 females and 13 males. In the control group there were 6 females and 12 males. The average age for the experimental group was 12.39 years old and the average age for the control group was 12.32 years old.

In the experimental group there were nine Grade 7 students, five Grade 8 students and three intermediate communication students. The intermediate communications students were exceptional students who had been identified as having a learning disability and received more then fifty percent of their class instruction in a small group setting. There were several students in the experimental group with special needs, either academic or physical. One student was identified as having Tourette's syndrome, one student required English as a second language assistance and one student was identified as being gifted. One student in the experimental group required extra assistance due to learning difficulties, although this student had not been officially recognized as being exceptional.

In the control group, there were nine Grade 7s, six Grade 8s and four students from the intermediate communications class. There were students in the control group with special needs as well. One student had spina bifida, one student was identified as gifted and one student was identified as requiring withdrawal support for a learning disability.

Written approval to carry out the research was obtained from the Peel Board of Education (Appendix B), the school's principal (Appendix C) and the parents (Appendix A). No students were involved in the study who did not return a signed consent form. If at any time any student indicated that he/she did not wish to continue, the student was removed from the study immediately.

By the end of this study, the dynamics of the control group and experimental group changed. These changes were due to students moving to other schools.

At the end of the study, the control group had nine Grade 7s, five Grade 8s and four students from the intermediate communications class. The student with special needs remained the same in this class.

In the experimental group, there were seven Grade 7s, five Grade 8s and three intermediate communications students. The students with special needs remained in the class, except the student who was ESL was no longer present.

In order to maintain confidentiality, children participating in the study were assigned a number which was used on all tests and work used throughout the study. Regular classroom assignments and unit tests were not coded. All data were stored in a locked file cabinet and were disposed of by shredding of paper upon completion of the study. Individual names were not used when reporting the findings, rather, group means were reported.

Materials

Dependent Measures

Five different test materials were developed to determine students' reading and writing abilities. These five dependent measures were administered during the pretest and posttest sessions.

First dependent measure. The first dependent measure was a reading comprehension test. Students were given two different passages to read at pretest and at posttest (for a total of four passages, see Appendix D - Appendix G). The passages were taken from a Grade 7 and 8 geography textbook. Passages were chosen so students would most likely have little or no prior knowledge about the topic (a pilot study was completed with a separate group of intermediate students to verify this assumption). Fry's readability formula was applied to each of the passages to determine their reading level (Fry, 1968). The passage about the Boros and the whales were rated as Grade 6 readability. The passage about the Mystery of the Bermuda Triangle and Band Aid was rated as Grade 7 readability. The two passages with the highest readability level were the shortest passages to accommodate for the more difficult level. The Fry readability test is accurate to within a Grade level. The Fry reading levels were validated by teacher and librarian judgments of material difficulty and by correlation with other reading formulas (Fry, 1968).

After reading the passage, the students were asked to recall what they had read to the best of their ability and to record this information on the "record" sheet (see Appendix D - Appendix G) developed by the Ontario Assessment Instrument Pool. The students were also asked to answer five fill-in-the-blank questions. The questions were about the main ideas and

supporting details of the passage. The retelling record sheet was marked by two separate markers.

Second dependent measure. The second dependent measure was a writing test. The students were asked to write a brief expository essay on two topics for both the pretest and posttest. The criteria for the essay evaluation focused on organization, introduction, conclusion and prewriting organization (see Appendix I). The writing evaluation format originated from the Peel English Curriculum for Grades 7 through 12. A numerical score was assigned to each passage. The essays were marked by the same markers who reviewed the students' reading comprehension tests.

Third dependent measure. The third dependent measure was a metacognitive test developed to acquire insight into what students were thinking as they completed the reading and writing tests (listed in Appendix K - Appendix L). A metacognitive test was developed for both the reading and writing tasks. Each test consisted of two parts. The first part had six questions about understanding the purpose, the main ideas and supporting details in reading and writing. Students responded to these questions using a likert scale where one equaled never and five equaled often. This section of the test was given a numerical score as determined by the students. The second part of the metacognitive test included open-ended questions. The answers for the second part of this test were collected and analyzed for

common themes. The questions focused on how the students read and wrote, and what the students were thinking when they read and wrote.

Fourth dependent measure. The fourth dependent measure was a standardized reading test, the Gates-MacGinitie (1992) (Appendix J). Students completed the vocabulary and reading comprehension subtests. The vocabulary test measured the students' reading vocabulary. This test contained 45 questions, each consisting of a test word in a brief context followed by five other words or phrases. The students' task was to choose the one word or phrase that meant nearly the same as the test word. The students were given 20 minutes to complete the test. The comprehension test measured the students' ability to read and understand passages of prose and simple verse. This test contained 14 passages of various lengths, with a total of 48 questions about these passages. The students were given 35 minutes to complete the test.

The Gates-MacGinitie was chosen because it is a popular standardized reading measure. The Canadian edition was administered which uses Canadian names. Canadian norms were developed using 42,000 students, with more than 300 per grade at most grade levels throughout all the provinces and the territories. All levels of the test have excellent reliability. The reliability coefficient for Level 7 for vocabulary is .88 and for comprehension is .93. The reliability coefficient for Level 8 for vocabulary is .88 and for comprehension is .93.

Fifth dependent measure. The fifth dependent measure involved recording students' performance on unit tests, assignments and research projects. All these measures were designed and administered as appropriate to the learning which had taken place in the classroom. Both classes had the same assignments.

In addition, the students and the teacher kept a learning log. Daily and/or weekly records were kept of what had been taught, the materials used, procedures followed and the perceived instructional effectiveness. This was an essential element of this study due to the diverse learning needs of the students in both the control and experimental groups. The students' learning logs provided insight into what tasks were appropriate, difficult or unclear. The teacher's learning log provided insight about the successful and unsuccessful sections of strategy instruction. The teacher's learning log provided insights into how strategic instruction could be improved and the time lines required for the students to acquire mastery of the strategy.

Treatment and Control Programs

The instructional materials were based on the geography guidelines as outlined in the Peel Board of Education Curriculum Guidelines. The major theme for the year was Cultural Geography which included such topics as manufacturing, databasing and movement patterns. Both the experimental and control conditions received three classes per week. Each class was 35 minutes in length. Thus, both the control and the experimental group

covered the same materials, with the only difference being the format of instruction.

Strategy Instruction about the Top Level Structure of Text

Prior to any formal instruction, the teacher used the "think aloud" procedure to discuss the cognitive and metacognitive processes that were needed to read a passage effectively. That is, students were explicitly instructed about how good readers read and given insight about how they could improve their reading by reflecting on how they read. Students were explicitly instructed about how good writers write and given insight about how they could improve their writing skills by reflecting on how they write. For example, students learned that good readers and writers recognize and utilize the top level structure of a passage. Good readers use the top level structure to organize the information they are learning from the text in their memory to increase comprehension and recall. Good writers use the top level structure of a text to organize their thoughts and ideas to improve the clarity and coherence of their writing.

An analogy between cooking and reading/writing was used. Students were asked to write down their favourite meal. Next, they were asked to list the ingredients in this favourite meal. After completing this task, students were asked to share their list with a peer. The peer was asked whether or not he/she could make the favourite meal based on the ingredients list. Most often, the answer was no. Through discussion, students recognized it was

not enough to know only the ingredients; one must also be aware of how the ingredients are organized or structured to make a enjoyable meal. Hence, it was not enough for students to be aware of the ingredients in a text (main ideas, supporting details); they must be aware of how the ingredients are structured as well to become capable readers and writers.

At the beginning of the study, whenever the daily lesson required reading a passage, the teacher and students worked together to construct a discourse framework (or schema) for the text. The teacher referred to a set of posted charts to aid the students in analyzing the topic material. Six different discourse shapes were posted, the teacher modeled her thought processes as she selected the framework that corresponded to the text passage. After the teacher modeled the process and provided a rationale for her selection, the students were instructed to identify the function of the text, the features of the text and underlying thinking skills associated with the text. When the appropriate discourse framework has been identified, the key shape, as developed by Mohan (1986), was used to graphically display how the main ideas and supporting details were interrelated in the text. Discourse frameworks were illustrated in Figures 2 - 8 in chapter two.

Over the course of the study, the students progressed towards mastering the process of identifying and manipulating the top level structure of a text. Students were given opportunities to apply the skill independently without teacher instruction.

Students' assignments focused on the topic of manufacturing. Initially, the students were asked to brainstorm about the characteristics they associated with good/poor readers and writers. Brainstorming occurred in small groups. Each group shared its ideas in a brief oral presentation. Common themes were discussed. Thus, this exercise helped the students and encouraged the students to develop an awareness and working vocabulary of the skills required to be a good reader and writer. Secondly, a lesson was taught which outlined the current findings of research. A mini psychology lesson was presented to the students.

The first manufacturing assignment focused on the subtopics of the three kinds of industry, product and the stages of manufacturing. The knowledge framework utilized and identified was the classification/definition framework. As this was the students' first introduction to the framework, the teacher modeled how to identify the purpose of the passage and identify the appropriate framework. After the passage was read independently once, the students and teacher reread the passage. The teacher encouraged the students to identify the main topics, subtopics and supporting details to fill in the framework. When the framework note was completed, the students had a study note based on the passage read.

The second manufacturing reading assignment focused on determining the most effective location for a factory. The teacher asked the students to read the passage and, as before, to use a highlighter to underline the

important details as they read. The students were encouraged to read critically. Students who were having difficulties reading the passage were encouraged to read in a group with the teacher. Upon completion of reading the passage, the teacher asked the students to think about the purpose of the text. Then the teacher modeled the questions aloud; she would think in her head to determine the purpose of the passage. As with the first assignment, the teacher modeled to the students the questions she would ask in her head to identify the passage's main ideas, subtopics and fill in the passage's knowledge framework. The framework for the second assignment was the classification framework.

The third reading assignment was a classification knowledge structure based on the manufacturing topics of production, consumption and resources. The students were asked to read the passage and to underline the important details in the passage. As with the prior assignments, the teacher modeled to the students how to effectively identify the purpose of the passage, and to relate the main topics and subtopics. The teacher assisted the students by providing each student with a photocopied blank framework sheet specifically designed for this reading task.

The fourth reading assignment was a compare/contrast knowledge structure. The topic of the passage was developed countries compared to underdeveloped countries with respect to production, consumption and resources. The students followed through the same steps: reading,

highlighting, teacher modeling how to identify the purpose and appropriate knowledge framework, identifying the passage's main topic, subtopics and supporting details to complete the knowledge framework. As with the previous assignment students were given a blank framework sheet to fill in. The blank framework sheet was a transitional tool between the framework being developed on the blackboard by the whole class, to each student trying to develop his/her own with the results being checked on the blackboard.

The next manufacturing assignment was on the history of automobile manufacturing. The same process as above was followed, except this time the passage could be divided into two different purposes and thus two different knowledge frameworks had to be completed. The first part of the passage focused on defining automobiles and engines. A classification framework was used. The second part of the passage focused on the history of automobile mass production manufacturing. A sequence knowledge framework was used.

The last reading assignment completed for this study was on manufacturing in Japan. The same process was followed as described previously except this passage consisted to three different purposes. Hence, three different knowledge frameworks had to be identified and completed by the students. The first part of the passage focused on the advantages and disadvantages of manufacturing in Japan. A compare/contrast framework was used. The second part of the passage described the working conditions

in a Japanese manufacturing plant. A description framework was used. The last part of the passage focused on the pros and cons of Canadians buying Japanese products. An evaluative knowledge framework was used.

For writing assignments or tasks, a process similar to the writing process (choose topic, collect necessary information, plan and complete outline, begin rough draft, conference with peer or teacher, revise and edit, conference and produce good copy) was used. However, one important step was added to the writing process with respect to the six discourse frameworks. After students had completed their research, they were asked to identify the purpose for which they were writing. Were they writing to compare, contrast, classify, define, list, describe, show cause and effect, spatial relationships or to evaluate? When the purpose had been identified, the students used the appropriate discourse framework as an organizational framework. The teacher provided instruction and feedback to aid the students in organizing their work appropriately. If the students had organized their work effectively, the students went directly to a word processor to produce their first rough draft, then the remainder of the writing process was followed. As with the reading tasks, direct teacher instruction and modeling was intensive during the first few writing assignments. Gradually, the students were asked to apply the skills independently.

The students completed two writing manufacturing assignments. The first assignment was a research project on the evolution of technology. The

second assignment was a comparison chart which outlined products imported into Canada and their characteristics.

The students worked through the following steps to complete the research assignment: identify topic, locate resources, read and make jot notes, identify purpose and main topic, subtopics and supporting ideas to organize their research notes on a framework prior to writing their rough copy. After producing their rough copy, the students were encouraged to have a peer or parent edit and revise their work. Also a lesson was taught which discussed some mechanical errors the students were making. The "how to's" of paragraph format, run on sentences, incomplete sentences, punctuation and grammar usage were discussed. Lastly, the students were asked to produce a good copy of their projects.

The knowledge framework in the writing process played a critical role in the planning and organizing stage. The students were asked to organize their research notes onto a description knowledge framework as the purpose of the assignment was to describe one period in the evolution of technology. This step encouraged the students to critically evaluate the information they had gathered on the topic.

The second writing assignment involved the students completing a compare/contrast chart on ten imported goods and their characteristics. The research the students carried out involved examining and determining where the goods were made. The data collected were presented in jot note form on

the comparison chart. Thus, the final copy for this assignment was the complete comparison framework chart.

Traditional Instruction

The students in the control group received a more traditional format of instruction. The same passages were read by this group as in the experimental group. The students were asked to read the passage and answer questions based upon the passage. The questions were content questions and originated from the textbook or the instructor.

For writing tasks, the students followed the writing process. The approach used in class followed the recursive writing process as defined by Flower and Hayes (1980; as cited in Pressley & Associates, 1990). The writing process was broken down into three processes: planning, translating and reviewing. Planning involved three sub-processes: a) generating the retrieval of items from memory; b) organizing, the selection of the most useful of the materials; c) goal setting, the judging of materials retrieved by generating as to whether they serve the current purpose of writing. Translating involved taking the information from memory and transforming it into acceptable English language sentences. Reviewing involved improving the quality of the written material. Two sub-processes were involved in reviewing: a) reading- to review; and b) editing- the detection and correction of errors in mechanics and meaning in the text. The three processes did not necessarily occur in a linear order, but in any order necessary to achieve

success. The way or method of organization was open to the students. The teacher provided instruction and feedback, but specific organizational frameworks were not taught. Students who were implicitly using a framework similar to the one being used with the strategic instruction group were encouraged to continue to using this method. This instructional approach is a typical approach to writing instruction followed by the Peel Board teachers.

Procedure

The study was carried out during students' regular geography sessions. The students in the experimental group received explicit strategy instruction about the top level structure of a text and how they could become more effective readers and writers by recognizing and using this structure. The pretest measures were gathered at the beginning of the study. The posttest measures were collected after fifteen weeks of explicit strategy instruction.

The control group used the same study materials and were responsible for the same academic requirements. The more traditional methods of question and answer and following the writing process were used for reading and writing instruction respectively. The pretest measures were collected at the beginning of the study. The posttest measures were collected after the fifteen weeks of instruction.

Upon completion of the study, students were debriefed about which format of instruction was the most effective. Classroom instruction for both groups was provided in the format which was found to be the most effective after the initial debriefing. In addition, copies of the findings were made available to the parents of participating students.

Limitations of the Study

There were several limitations in this study. The small subject sample size could affect the ability of the statistics to define any clear relationships or generalizations among variables.

The reliability and validity of the dependent measures, except for the Gates-MacGinitie reading test, were questionable. Each test was developed for this study. Repeated use of the test in other studies could provide valuable information as to the reliability and validity of the tests developed for this study. The Gates-MacGinitie reading test was limited in its useage because the test was not designed to measure discourse strategy/knowledge.

The design of this study was limited because both classes were instructed and evaluated by the same instructor. There were concerns about biases towards one group or the other, and how this could possibly influence positively or negatively the outcome of the study. It was possible that the teacher's different experiences and personal preferences for the two classes

could influence the observations of students' success and classroom performance scores.

Finally, class make-up determines success of any program. The relationship among the students and their different learning styles will affect how the explicit strategy instruction of the top level structure of a text will be received and internalized. Some students will internalize the skills more quickly than others and be more successful in mastering independent use of the strategy. Also, a class containing a greater number of students with special learning needs would need a more intense strategy instruction program before seeing some success than a class where the students are more capable, independent learners.

Conclusion

The study was developed to investigate the effectiveness of explicit strategy instruction about the top level structure of a text. The study was designed to answer the following question: Will students in the explicit instruction condition achieve greater scores on the dependent measures of the reading passage, writing passage, standardized reading comprehension test, metacognitive test and in class performance evaluation scores than the control group who received a more traditional method of instruction?

CHAPTER FOUR: RESULTS

Introduction

The results of this study are presented in seven sections, with one section for each of the dependent measures. First, the findings from the reading comprehension test are presented. Second, the findings from the writing test are presented. Third, the findings from the metacognitive tests are presented. Fourth, the findings from the standardized reading test, the Gates-MacGinitie, are presented. Section five presents the results when a combined reading and writing test score was determined. The combined score was determined by both markers agreeing upon one score or the other. Section six presents the findings from the students' class performance are presented. Section Seven presents the teacher's journal observations. Table 1 lists the means and standard deviations for each test as a function experimental condition and test time.

Data Analysis

Once the data had been collected, a 2 (condition) by 2 (time) ANOVA with repeated measures in the last variable was carried out for each of the dependent measures. This analysis determined if a significant main effect existed for the types of instruction for the pretest and posttest measures, and whether the interaction effect been condition and time was significant. If a significant difference existed, the Tukey Kramer post hoc test was used to

significant difference existed, the Tukey Kramer post hoc test was used to determine exactly where the differences occurred. Each dependent measure was analysed with and without the students with learning disabilities scores. Since the pattern of results was similar, only the combined scores were reported below.

Reading Comprehension Test

For the reading comprehension test, students were given two different passages to read at pretest and posttest. After reading the passages, the students were asked to recall what they had read and to record this information on a record sheet. The students were also asked to answer five fill-in-the-blank questions. The answer sheets were marked by two markers. The first marker was considered an expert marker because this person was employed in the field of education. The second marker was considered a novice marker because this person was not employed in the field of education. One mark was assigned for every main idea recalled and a half of a mark was assigned for every supporting detail recalled.

There was no significant main effect for condition, $F(1,33)=.01$, $p>.05$, or for time $F(1,33)=2.37$, $p>.05$ for the first recall test marked by the expert marker. Also, the interaction between condition and time was not significant, $F(1,33)=2.37$, $p>.05$.

There was not a significant main effect for condition for the first recall test marked by the novice marker, $F(1,33)=).33$, $p>.05$. However, there was a significant main effect for time $F(1,33)=17.53$, $p<.05$. All students performed significantly better at posttest than at pretest, $q=2.602$, $p<.05$. The interaction between condition and time was not significant, $F(1,33)=.00$, $p>.05$.

Table 1

Means and Standard Deviations for each Dependent Measure as a Function of Experimental Conditions

Group 1 - experimental group
Group 2 - control group

M= mean score
SD= standard deviation

Condition		M		SD	
		Group 1	Group 2	Group 1	Group 2
Read Recall					
Passage 1-expert	pretest	2.167	2.667	1.53	1.680
	posttest	4.333	3.944	1.997	1.697
Read Recall					
Passage 1-novice	pretest	2.600	2.944	1.854	1.870
	posttest	3.800	4.139	1.878	1.901
Read Blanks					
Passage 1-expert	pretest	3.333	3.333	1.633	1.414
	posttest	3.000	2.667	1.069	1.475
Read Blanks					
Passage 1- novice	pretest	3.333	3.333	1.633	1.414
	posttest	3.133	2.944	1.060	1.349
Read Recall					
Passage 2-expert	pretest	3.233	3.306	2.129	2.184
	posttest	3.100	2.611	1.854	1.451
Read Recall					
Passage 2-novice	pretest	3.467	3.167	1.420	2.142
	posttest	2.400	2.306	1.339	1.535
Read Blanks					
Passage 2-expert	pretest	1.467	2.000	1.060	1.414
	posttest	2.267	1.778	1.400	1.153

Read Blanks					
Passage 2-novice	pretest	1.533	2.000	1.187	1.455
	posttest	2.300	1.667	1.222	1.071
Writing Passage 1					
expert	pretest	8.633	8.333	1.932	1.328
	posttest	9.033	9.528	1.093	1.538
Writing Passage 1					
novice	pretest	9.933	9.806	2.712	1.888
	posttest	10.733	11.222	2.052	1.555
Writing Passage 2					
expert	pretest	9.267	8.861	2.470	1.861
	posttest	9.767	10.500	0.563	1.475
Writing Passage 2					
novice	pretest	10.000	10.833	2.104	2.550
	posttest	10.733	10.889	1.033	1.323
Metacognitive					
Reading	pretest	23.357	24.444	3.104	3.166
	posttest	23.929	24.278	3.430	3.528
Metacognitive					
Writing	pretest	25.600	24.278	3.430	3.528
	posttest	24.133	23.000	3.681	3.430
Gates-MacGinitie					
Vocabulary	pretest	5.307	6.694	2.213	2.580
	posttest	6.473	7.344	1.890	2.684
Comprehension	pretest	5.060	6.033	2.145	2.079
		5.513	6.823	2.135	3.212
Students' Class Performance					
Scores	term one	62.330	65.667	15.637	11.555
	term two	60.333	59.667	12.675	12.902

Combined Read Recall					
passage 1	pretest	2.433	3.056	1.624	1.617
	posttest	4.267	4.208	1.963	1.875
Combined Read Blanks					
passage 1	pretest	3.333	3.444	1.633	1.381
	posttest	3.200	2.944	0.966	1.349
Combined Read Recall					
passage 2	pretest	3.533	3.611	1.541	2.026
	posttest	3.067	2.583	1.635	1.427
Combined Read Blanks					
passage 2	pretest	1.533	2.167	1.187	1.339
	posttest	2.400	1.806	1.242	1.073
Combined Writing					
passage 1	pretest	9.467	9.528	2.200	1.242
	posttest	10.167	10.639	1.531	1.391
Combined Writing					
passage 2	pretest	9.733	10.167	2.060	1.855
	posttest	10.533	11.020	0.990	1.429

For the first fill-in-the-blanks test marked by the expert marker, there were no significant main effects for condition, $F(1,33)=.19$, $p>.05$, or for time, $F(1,33)=2.55$, $p>.05$. The interaction between condition and time was not significant, $F(1,33)=.28$, $p>.05$.

For the first fill-in-the blanks test marked by the novice marker, there were no significant main effects for condition, $F(1,33)=.06$, $p>.05$, or for time, $F(1,33)=.99$, $p>.05$. The interaction between condition and time was not significant, $F(1,33)=.10$, $p>.05$.

For the second recall test marked by the expert marker, there were no significant main effects for condition, time or interaction between condition and time, $F(1,33)=.13$, $p>.05$, $F(1,33)=1.66$, $p>.05$ and $F(1,33)=.76$, $p>.05$, respectively. For the second reading recall test marked by the novice marker, there were no significant main effects for condition, time or interaction between condition and time, $F(1,33)=.17$, $p>.05$, $F(1,33)=8.62$, $p>.05$, and $F(1,33)=.10$, $p>.05$ respectively.

For the second fill-in-the-blanks test marked by the expert marker, there were no significant main effects for condition or time, $F(1,33)=.00$, $p>.05$ and $F(1,33)=3.25$, $p>.05$ respectively. Nor was the interaction between condition and time significant, $F(1,33)=3.25$, $p>.05$. For the second fill-in the blanks test marked by the novice marker, there were no significant main effects or interaction effects, $F(1,33)=.06$, $p>.05$, $F(1,33)=.62$, $p>.05$, and $F(1,33)=3.99$, $p>.05$.

Writing Test

During the writing test, the students were asked to write a brief expository essay on two topics at both the pretest and posttest. A numerical score was assigned to each passage by both an expert and novice marker. The criteria for essay evaluation focused on organization, introduction, conclusion and prewriting organization. Each criterion was marked and a total score was assigned to each essay (see Appendix I).

There was no significant main effect for condition for the first writing test marked by the expert marker, $F(1,33)=.05$, $p>.05$. There was a significant main effect for time, $F(1,33)=6.67$, $p<.05$. All students performed significantly better at posttest than at pretest, $q=2.275$, $p,.05$. The interaction between condition and time was not significant, $F(1,33)=1.66$, $p>.05$.

For the first writing test marked by the novice marker, there was no significant main effect for condition, $F(1,33)=.10$, $p>.05$. However, there was a significant main effect for time, $F(1,33)=6.28$, $p<.05$. All students performed significantly better at posttest than at pretest, $q=2.267$, $p,.05$. The interaction between condition and time was not significant, $F(1,33)=.49$, $p>.05$.

For the second writing test marked by the expert marker there was no significant main effect for condition, $F(1,33)=.11$, $p>.05$. The interaction between condition and time was not significant, $F(1,33)=2.80$, $p>.05$.

However, there was a significant main effect for time, $F(1,33)=9.88$, $p>.05$. All students performed significantly better at posttest than at pretest, $q=2.64$, $p<.05$.

For the second writing test marked by the novice marker there were no significant main effects for either condition or time, $F(1,33)=.91$, $p>.05$ and $F(1,33)=.98$, $p>.05$ respectively. Also, the interaction between condition and time was not significant, $F(1,33)=.72$, $p>.05$.

Metacognitive Tests

Metacognitive tests were administered to acquire insight into what students were thinking as they completed the reading and writing tests. A different metacognitive test was designed for the reading and writing tests. Each metacognitive test consisted of two parts. The first part of the metacognitive test had six questions. The students responded to these questions by circling the answer they believed was most appropriate. These circled scores were added to determine a final score. The second part of the test was open-ended questions. The answers for the second part of this test were collected and analyzed for common themes.

For the metacognitive reading test, there were no significant main effects for condition, $F(1,33)=.48$, $p>.05$, or for time, $F(1.33)=.13$, $p>.05$. Also, the interaction between condition and time was not significant, $F(1,33)=.43$, $p>.05$.

For the metacognitive writing test, there were no significant main effects for condition, $F(1,33)=1.58$, $p>.05$. There was a significant main effect for time, $F(1.33)=7.15$, $p<.05$. All students performed significantly better at pretest than at posttest, $q=1.748$, p,.05. The interaction between condition and time was not significant, $F(1,33)=.03$, $p>.05$.

The results of the open-ended questions could be categorized into several themes. When the students were asked how they read, the answers fell into two categories. The two categories were physical and cognitive. A physical response included such answers as reading well, quickly, slowly, in their heads, skimming, in a quiet place, with soft music, etc.... Thus, the students were describing some aspect of the physical part of reading. The number of physical responses at pretest for the experimental group was 13 out of 15 and for the control group, 16 out of 18. The number of responses at posttest for the experimental group was 11 out of 15 and for the control group, 13 out of 18 responses. A cognitive response was when the students answered that they visualized when they read, tried to comprehend, understand or focus on the main ideas. Thus, the students were not focusing on the physical task of reading but were thinking about the reading process in their heads. The number of cognitive responses at pretest for the experimental group was 2 out of 15 and for the control group, 2 out of 18. At posttest, the number of responses for the experimental group and control group were 4 out of 15 and 5 out of 18 respectively. Therefore, the majority

of responses at pretest and posttest for both the experimental group and control group fell into the physical theme. Hence, both the control group and experimental group recorded similar themes at pretest and posttest.

When the students were asked what they were thinking when they read, the results could be categorized into two themes, cognitive and emotional. The majority of answers for both the control and experimental group at pretest and posttest were cognitive. The students thought about the meaning and purpose for the story. Many students said they tried to visualize themselves in the story. They tried to make predictions and estimate when the task would be completed. The number of cognitive responses at pretest for the experimental group was 14 out of 15 and for the control group, 17 out of 18 responses. The number of cognitive responses at posttest for the experimental group was 14 out of 15 and for the control group, 17 out of 18 responses The answers which fell into the emotional category were responses which stated that the students were thinking about how interesting or enjoyable the story was. Also, some students reinforced their reading confidence level through positive thinking. These students repeated phrases such as "I can do it" over and over in their heads as they read. The number of emotional responses at pretest for the experimental group was 1 out of 15; for the control group, 1 out of 18. At posttest the number of emotional responses for the experimental group and control group

were 1 out of 15 and 1 out of 18 respectively. Both the experimental and control group indicated similar themes at pretest and posttest.

When the students were asked about how they wrote, four themes emerged. The first theme was physical. Some students focused on how well, how fast, how slow, how messy, etc... they wrote. This theme was present in both groups' responses at pretest and posttest. The number of physical responses at pretest for the experimental group was 10 out of 15 and for the control group, 10 out of 18. The number of physical responses at posttest for the experimental and control group were 11 out of 15 and 11 out of 18 respectively.

The second theme was the mechanics of writing, (i.e., spelling, punctuation and grammar). This theme was present at pretest and posttest for both conditions. The number of mechanical responses at pretest for the experimental group was 1 out of 15 and for the control group, 1 out of 18. The number of mechanical responses at posttest for the experimental group and control group were 2 out of 15 and 2 out of 18 respectively.

The third theme was organization, (i.e., planning and organizing thoughts before writing). Again, this theme was present at pretest and posttest for both conditions. The number of organizational responses at pretest for the experimental group was 2 out of 15 and for the control group, 1 out of 18. The number of organizational responses at posttest for the

experimental group and control group was 2 out of 15 and 2 out of 18 respectively.

The last theme was cognitive. Answers which fell into this category involved students responding in a way which suggested that they thought and planned in their minds prior to writing. These responses used words such as "imagination," "details" and "descriptive images." As with the other themes, this theme was present at pretest and posttest for both conditions. The number of cognitive responses at pretest for the experimental group was 1 out of 15. The number of cognitive responses at pretest for the control group was 4 out of 18. At posttest the number of cognitive responses for the control group and experimental group was 2 out of 15 and 4 out of 18 respectively.

When the students were asked "What are you thinking when you are writing?", three themes emerged. The first theme was cognitive. Students used words such as "elaborate," "plan," "revise," "appropriateness," "relationship between ideas" to suggest they were evaluating their writing at a cognitive level. This theme was present for both conditions at pretest and posttest. The number of cognitive responses at pretest for the experimental group and control group was 13 out of 15 and 15 out of 18 respectively. At posttest the number of cognitive responses for the experimental group and control group was 14 out of 15 and 15 out of 18 respectively.

The second theme was visualization of self as character. Many students in both conditions at pretest and posttest imagined themselves as the main character. This suggested the students were confusing expository and narrative text. The number of visualization responses at pretest for the experimental group was 2 out of 15 and for the control group, 1 out of 18. At posttest the number of visualization responses for the experimental group and control group was 1 out of 15 and 1 out of 18 respectively.

The third theme was emotional. These responses involved students thinking about positive self-reinforcement strategies for task completion. These students were thinking about their potential grade, and how relevant the task was to their lives. This theme was only present in the control group. The number of emotional responses for the control group at pretest and posttest was 2 out of 18 and 2 out of 18 responses respectively.

Gates-MacGinitie Standardized Reading Test

Students completed both the vocabulary and reading comprehension subtests of the Gates-MacGinitie. For the vocabulary subtest, the main effect for condition was not significant, $F(1,33)=2.03$, $p>.05$. However, the main effect for time was significant, $F(1,33)=13.64$, $p<.05$. All students performed significantly better at posttest than at pretest, $q=1.490$, $p<.05$. The interaction between condition and time was not significant, $F(1,33)=2.03$, $p>.05$.

For the comprehension subtest, there were no significant main effects for either condition or time, $F(1,33)=2.29$, $p>.05$ and $F(1,33)=2.94$, $p>.05$ respectively. Also, the interaction between condition and time was not significant, $F(1,33)=.27$, $p>.05$.

Students' Class Performance Scores

This dependent measure involved recording students' performances on unit tests, assignments and research projects. There were no significant condition or time main effects for the students' class performance, $F(1,33)=.11$, $p>.05$, $F(1,33)=3.23$, $p>.05$ respectively. The interaction between condition and time was not significant, $F(1,33)=.81$, $p>.05$.

Combined Reading and Writing Test Results

In addition to the other sections, another statistical analysis was completed. This section will summarize the statistical significance of the students' scores on the reading and writing test when the scores from the different markers (expert and novice) were agreed upon to become one score. The two markers co-operatively agreed upon this score by choosing either one or the other of the original scores.

For the first combined recall, there was no significant main effect for condition, $F(1,33)=.12$, $p>.05$. However, there was a significant main effect for time, $F(1,33)=24.63$, $p<.05$. All students performed significantly better at

posttest than at pretest, q=3.14, p,.05. The interaction between condition and time was not significant, F(1,33)=2.32, p>.05.

For the first combined fill-in-the-blanks test, there were no significant main effects for condition, F(1,33)=.04, p>.05 or for time, F(1,33)=1.05, p>.05. The interaction between condition and time was not significant, F(1,33)=.35, p>.05.

For the second combined recall test there were no significant main effects for condition, F(1,33)=.17, p>.05 or interaction between condition and time, F(1,33)=.74, p>.05. However, there was a significant main effect for time, F(1,33)=5.22, p<.05. All students performed significantly better at pretest than at posttest, q=1.770, p<.05.

For the second combined fill-in-the-blanks test passage two, there were no significant main effects for condition, F(1,33)=.00, p>.05 or for time, F(1,33)=.82, p>.05. The interaction between condition and time was significant, F(1,33)=4.86, p<.05. There was a significant difference between the two groups at pretest, q=2.23, p<.05. There was not a significant difference between the two groups at posttest, q=2.18, p>.05. Descriptively, the class with regular instruction scored higher at pretest than did the class who received explicit instruction. In the posttest, the class who received explicit instruction scored higher than the class who received regular instruction.

For the first combined writing passage, there was no significant main effect for condition, $F(1,33)=.38$, $p>.05$. However, there was a significant main effect for time, $F(1,33)=6.34$, $p<.05$. All students performed significantly better at posttest than at pretest, $q=2.340$, $p<.05$. The interaction between condition and time was not significant, $F(1,33)=.33$, $p>.05$.

For the second combined writing passage, there was no significant main effect for condition, $F(1,33)=1.07$, $p>.05$. There was, however, a significant main effect for time, $F(1,33)=5.41$, $p<.05$. All students performed significantly better at posttest than at pretest, $q=2.08$, $p<.05$. The interaction between condition and time was not significant, $F(1,33)=.01$, $p>.05$.

Teacher's Journal Observations

During the weeks of strategy instruction the geography teacher kept a journal of the students' progress and other general class observations. Initially, the teacher instructed the students about recent research investigating how good readers read and how good writers write. Hence, a mini-psychology lesson was taught. The students were involved in these lessons through brainstorming and collaborative learning activities. During this interval, the students in the control condition worked on reinforcing their geography mapping skills.

The teacher observed the students were very responsive to this initial introductory stage. They were eager to discuss information which might be discussed in a college psychology class.

During the first reading assignment, the teacher "talked aloud" about how she would complete the assignment. The teacher explained and explored with the students how to identify and utilize the top level structure of a text to achieve comprehension. It was noted that many students could successfully read the words in the passage. However, when the students were asked questions about what they read, they were unable to recall any important details or main ideas. The students felt that by completing the physical task of reading the passage, they had completed the assigned task. They were not prepared to be asked to explain what the main ideas and supporting details were or how these ideas were related. The instructor observed frustration from the students, which caused the instructor to feel frustrations as well.

A similar observation was noted in the control group. However, this group was more comfortable with the task of answering questions on the passage. Most likely, their comfort level was due to previous experiences with this form of learning exercise. The teacher reflected that the task of answering a set of questions about a passage is one most educators use to evaluate whether or not students have comprehended a text.

As the study continued, the instructor noticed some improvement in the experimental group, but the majority of the students were still very dependent on the instructor's assistance in identifying and relating the main ideas and supporting details. For example, when the students were asked to read a passage defining industry, most students were able to locate the definition in the text. However, many students experienced difficulty in identifying the three types of manufacturing (i.e., primary, secondary and tertiary). The teacher modeled how students could have used the paragraph structure of the text in aiding them in identifying the types of manufacturing. This assisted some students. Other students need further assistance from the teacher through the teaching process of thinking aloud. The teacher and students were still working through the uncertainty and frustrations of teaching/learning a new strategy.

Another difficulty students experienced was how to successfully arrange the physical layout of the note on industry. Students required assistance to effectively layout the framework and complete the note. The instructor developed a blank template of the appropriate expository framework for the various reading assignments to assist the students in gaining independence at this skill. This blank template served as a bridge towards independent mastery of the strategy. The teacher felt the template increased the students' comfort level. The template allowed the students to think about the passage, its main ideas and supporting details, not how their

written note should be arranged. The template was an effective idea. However, at the conclusion of the study, the students had not yet mastered this step. The teacher recorded that the students with learning disabilities seemed overwhelmed, and the students' difficulties reinforced to the teacher how many of these students did not see the relationship between ideas in a text. Many students decided to work with a friend to aid each other in successfully completing the task.

During the writing tasks, the instructor observed students in both groups had great difficulty with the mechanics of writing. Students encountered difficulty with proper paragraph formation, sentence structure, essay format, grammar, punctuation and spelling. For example, when asked to write a four-paragraph essay on a topic, the students had few skills to call upon to determine how the research notes they collected should be organized to make effective paragraphs. The instructor believed these difficulties were hindering the students' progress to such an extent that three writing instruction lessons were taught to both groups. The instructor experienced frustration due to the amount of one-to-one conferencing students in both groups required.

Also, the students experienced difficulties when asked not to write in the first person but to write in the third person. For example, the students were writing sentences which started with "I think the steam engine was an important discovery because..." This proved to be a challenge for most of the

students in both groups, suggesting students continued to confuse narrative and expository text. The students' comfort level with narrative writing seemed to be much higher than expository writing. The students found reading an expository passage difficult because there were no characters with which to identify. They found expository writing difficult because they could not imagine themselves as a character; instead they had to research and relate main ideas and details about some particular concept (this difficulty was observed in both the control and experimental group). Thus, the students in the experimental condition were not able to master the strategy being taught. The students seemed to understand the usefulness of organizing their main ideas and supporting details onto a framework prior to writing. Yet, the step from outline to completed essay was still overwhelming for most students. For example, the students could identify the main idea as the stone age and the supporting subtopics as way of life, housing and diet. Yet, the students experienced difficulty in writing an introductory paragraph which introduced the main topic and supporting paragraphs for the subtopics (one paragraph for each subtopic). The students' level of understanding about the topic and how the subtopics related was weak. A few very capable students were able to successfully master this process.

Towards the end of the study, the teacher reflected that the reading abilities of both groups were still weak. The weaker students in both groups seemed to be satisfied with copying the work of a more capable student. The

students seemed to respond making scheme where the number of points for the main ideas and supporting details were clearly stated prior to beginning the task. For the most part, the weaker students did not seem as motivated as the more capable students.

In her journal, the teacher questioned the "readiness" level of the intermediate students for the explicit strategy being taught. This question of the students' readiness level arose not only from classroom observations but the pretest and posttest results from the metacognitive tests. The open-ended questions from these tests suggested that the students (from both the experimental and control group) were focusing primarily on the physical and mechanical aspects of writing. A few students, to some degree, were working at the cognitive level but not the majority of the students.

The teacher observed successful strategy instruction is a very extensive process. The instructor hypothesized in her journal that perhaps Six more months of strategy instruction would have assisted the majority of students in the experimental condition in mastering independent use of the strategy. It is important to note the students were receiving three classes (each class was 40 minutes in length) per week. The study was fifteen weeks long. Therefore the total amount of strategy instruction was 1,800 minutes, or 30 hours. This is only a day and a quarter of instruction.

Summary of Findings

The intent of this study was to investigate the effectiveness of explicitly teaching intermediate students a reading/writing strategy which required them to identify and utilize the top level structure of a text. It was expected that explicit strategic instruction about the top level structure of text would result in greater improvement in students' reading and writing abilities versus a more traditional reading and writing instruction when students answer content questions and follow the writing process.

However, the results from the posttest do not support the preceding statement. There were no significant main effects for condition in any of the tests. There were significant main effects for time in the following tests: first recall test - expert marker, first recall test - novice marker, metacognitive writing test, first writing test - expert marker, first writing test - novice marker, second writing test - expert marker, Gates-MacGinitie vocabulary subtest, first combined recall test, second combined recall test, first combined writing test, and second combined writing. The main effects for time for all other tests were not significant. The interaction between condition and time was not significant for any of the tests, except for the second combined fill-in-the-blanks test.

The scores for the various test suggest there was little significant main effect for condition or for time. Also, there was little interaction between condition and time which was significant. Thus, the students in the

experimental condition did not demonstrate greater improvement in their reading and writing abilities than the students in the control group.

The open-ended questions of the metacognitive reading and writing test suggest the intermediate students are mindful of the physical and cognitive processes involved in a reading and writing task. However, the majority of the students focused on the physical processes involved in reading and writing. For example, the students discussed how quickly they read or how messy they wrote. This may suggest these intermediate students were not yet confident enough in their physical abilities to move towards focusing primarily on the cognitive processes involved in being a capable reader and writer. Also, the students' answers focused on narrative text, more so than expository text. For example, the students said they imagined themselves as a character in the story to predict what was going to happen next in their stories. Yet, the students were asked to write an essay, not a story.

The teacher's journal noted several important observations. The teacher's observations indicated the students in the experimental condition were not yet at the mastery stage of strategy instruction when the posttest occurred (at the end of fifteen weeks of instruction). The observation indicate the students had little previous experience with expository reading and writing. Thus, the instructor believed that the students could be described as novice at the beginning of the study. Another important observation noted was that successful strategy instruction is not a "quick fix" approach. The

process is lengthy and requires careful management of the strategy instruction steps to be successful. Thus, the teacher's observations suggest several possibilities as to why the students in the experimental condition did not show greater improvement: a) students failed to reach mastery of the strategy, b) length of the study was not sufficient, c) readiness level of students.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

Reading and writing are two of the essential building blocks of any student's educational career. Most educators and students realize there is a very important connection between becoming a capable reader and becoming a capable writer. Therefore, educators should teach learning strategies and skills which can be effectively used by learners in both writing and reading tasks. The purpose of this study was to investigate the effectiveness of explicitly teaching intermediate students a reading/writing strategy which required them to identify and utilize the top level structure of a text. It was expected that explicit strategy instruction about the top level structure of a text would result in greater improvement in students' reading and writing abilities versus a more traditional reading and writing instruction when students answered content questions and followed the writing process.

Conclusions

The results of this study suggested there was little effect for condition or for time. Also, the interaction between condition and time was not significant for most of the dependent measures. Therefore, the students in the experimental condition did not demonstrate greater improvement in their reading and writing abilities than the students in the control group.

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Expository Reading Tests

The students' progress in mastering the expository reading task was measured in their ability to recall the main ideas and supporting details in a recall test. Also, it was measured in the students' ability to answer fill-in-the-blank questions based on the reading passages. The results of this study suggested the intermediate students' reading abilities were not affected by the explicit strategy instruction about the top level structure of a text. Other research has suggested that good readers do look for patterns which tie together the main ideas and supporting details. Good readers search for the author's primary thesis which binds the content to the organizational framework (Meyer, Brandt & Bluth, 1980). Yet, the results of this study did not reinforce these research results. The students in the experimental group were taught explicitly how to use a framework to relate the main ideas and supporting details of a text, but the reading scores of these students did not improve.

A few possible explanations can be given. First, the students in the study may not have qualified as good readers at the end of the fifteen weeks of instruction. Perhaps additional strategy instruction time was required to ensure the students had become good readers. Second, the test materials for

the reading measures may not have measured the students' reading abilities accurately. Repeated usage in other studies may answer this question. Third, the maturity level of the students may have interfered with the students' ability to master the strategy effectively. Taylor (1980) summarized that the older the individual, the greater the chance of a top level structure being used. Yet, Taylor also suggested younger children were capable of developing top level structure knowledge if given the knowledge and skills necessary. Perhaps the students in this study were not given all of the necessary knowledge and skills. Further research could be conducted to determine if it was the student's maturity level or lack of necessary knowledge and skills which resulted in this study's results.

Expository Writing Test

During these tests, the intermediate students were asked to write a three- to four-paragraph essay on four different topics (two topics at pretest and two topics at posttest). The essays were marked by an expert and a novice marker. In addition to these scores, a combined score was agreed upon by both markers. The results of this study suggested the intermediate students' writing abilities were not affected by explicit strategy instruction about the top level structure of a text. Current research suggested that good writers develop an ongoing framework for their text. Moreover, good writers use their knowledge of the top level structure of a text to develop their text (El-Dinary, Brown & Van Meter, in press; Englert & Raphael, 1988; Graham

& Harris, 1989; Hillocks, 1986). Thus, the students in the study who were taught how to use a knowledge framework should have shown improvement, but they did not.

Several possible explanations could be given to explain why the improvement was not achieved. First, the teacher noted that a fairly large amount of class time during the writing assignments had to be devoted to helping students with the mechanics of writing, such as how to make paragraphs or how to write in the third person. Perhaps not enough time was devoted to teaching the strategy. The students may not have had enough time to master the strategy. If this were true, then the students would have scored as poor writers in the posttest measures. Second, the writing tests may not have accurately evaluated the students' writing abilities. As with the reading test, repeated usage in other studies may answer this question. Third, the students may not have had enough previous learning experiences with expository writing. Thus, a lack of knowledge and skill in this area would have required the amount of time devoted to strategy instruction to be increased.

Reading and Writing Metacognitive Tests

Upon completing the reading and writing tests, the students were asked to complete metacognitive reading and writing tests. The objective of these tests was to try to determine what the students were thinking about when they read and wrote. The first part of the metacognitive test had six

questions which focused on understanding the purpose, the main ideas and supporting details in reading and writing tasks. The results of this study suggested the students were not more aware of how they were reading or writing at the end of the study. Thus, explicit strategy instruction about the top level structure of a text did not affect the students' metacognitive awareness. Research has suggested that content knowledge, process knowledge and metacognitive knowledge must be taught in all lessons to ensure effective strategy instruction (Gaskins & Elliot, 1991). Perhaps this study failed to effectively include all three elements in all the lessons. The teacher's journal reflected on the difficulties students seemed to be experiencing over the mechanics of writing a research report or highlighting a passage. Consequently, process knowledge and content knowledge may have been emphasized too much and metacognitive knowledge too little. During the initial stages of strategy instruction, the lessons were teacher directed. The teacher modeled the chosen strategy through "think alouds" and reflected on the importance of the strategy. Nevertheless, perhaps the amount of modeling was not sufficient. The students' failure to master the strategy may lie with the instructor's strategy teaching abilities.

The second part of the metacognitive test was two open-ended questions. Several themes were repeated throughout the students' responses. Most commonly, the students' answers focused on the mechanical or physical aspects of how they read or wrote. Their answers used words

such as "quickly," "slowly," "messy," "neat" and "quietly." Some students used words which suggested a cognitive awareness of the thought processes involved in reading and writing. A few students described the reading and writing process at the emotional level. Their answers used phrases such as "to the best of my ability" or "I tell myself I can do it." These themes were common to both groups (control and experimental) at pretest and posttest.

The statistical findings of the metacognitive tests and the students' open-ended answers suggested these intermediate students' skills were not at an appropriate readiness level when the study began. This conclusion strengthens the instructor's classroom observations. The instructor's journal outlines several class lessons where skills such as highlighting, underlining, paragraph formatting, grammar usage and punctuation were discussed to aid students in successfully completing the various reading and writing assignments. Again, it is questionable whether or not the length of the study was appropriate. When the instructor had to devote class time to teaching specific skills, valuable strategy instruction time was lost. Thus, this reduced the total amount of strategy instruction time to even less than a day and a quarter.

Gates-MacGinitie Standardized Reading Test

The students completed the vocabulary and reading comprehension subtests of the Gates-MacGinitie standardized reading test. The scores for the vocabulary and comprehension subtest showed no improvement. Thus,

overall it does not appear that explicit strategy instruction about the top level structure of a text improved the students' reading abilities.

Students' Class Performances Scores

These scores were determined by recording the students' performances on unit tests, assignments and research projects. The results of this study did not show any improvement in the students' class performances. Thus, the students' class performances did not seem to be affected by explicit strategy instruction on the top level structure of a text.

Some possible explanations for these results can be given. First, the students in the experimental group were not able to successfully master the strategy. Second, the method of strategy instruction may have been at fault. A number of instructional models have been developed to assist educators in effectively teaching learning strategies. Many of these models share similar instructional features in their approaches (e.g. Strategies Intervention Model by Deshler & Schumaker, 1986; Benchmark Model by Gaskin & Elliot, 1991; and Students Achieving Independent Learning Model by Schuder, 1993). One instructional feature was that a regular review of the key instructional points was necessary. However, the teacher's journal reflected that there was not enough time for regular review to occur. The students were still striving to learn the strategy. Thirdly, it may not have been the form of instruction but the length of the study which was not appropriate.

Teacher's Journal

Throughout the study, the teacher kept a journal of observations and reflections. The journal recorded observations and reflections on both the control group and the experimental group. The journal suggested possible explanations as to why the reading and writing abilities of the students did not improve.

The journal suggested the students had not yet mastered independent use of the strategy when the fifteen-week time period of the study concluded. The teacher reflected that students in both groups were experiencing difficulty understanding expository text, its characteristics and their implications for a reading and writing task. The students seemed to be making a difficult transition from their high level of comfort with narrative text, to beginning to learn to effectively cope with expository text.

The readiness level of these intermediate students was questioned in the teacher's journal. Many lessons had to be devoted to reinforcing mechanical reading and writing skills which should have been mastered previously. Again, this was noted in both the control and experimental group.

The teacher's reflections about the students' readiness level reinforced the themes which appeared from the students' answers on the open-ended section of the metacognitive texts. In their answers, the students seemed to focus on the physical and mechanical processes of how they read and write.

The instructor believed the students entered the study with weak mechanical and cognitive skills for expository text. Perhaps, then, fifteen weeks of study was not enough time to teach both the mechanical skills and the top level structure strategy effectively. Yet, the instructor noted during the geography lessons when the weaknesses in the students' reading and writing mechanical skills appeared, it was essential to use these very teachable and relevant moments to reinforce the students' mechanical skills. Again, these observations were relevant to both the control and experimental group.

Recommendations for Further Research

Further research might compare individual scores as well as the combined class scores. Special attention might be made to those students who seemed to have weaker reading and writing abilities at the onset of strategy instruction to see if the strategy instruction helped them to overcome some of their difficulties. Research which examined the effectiveness of strategy instruction in improving the learning performances of students with reading or writing difficulties has suggested positive results (Bos & Anders, 1988; Graham & Harris, 1989). This analysis of individual scores may provide interesting insights. If the method of strategy presentation was proven insufficient, it could be altered to become more effective for the students with learning needs. For example, the instructional groups could have been made smaller (a large class of 15 to a smaller group

of 5). Perhaps, the strategy instruction should be integrated first into these students' language arts programs, and then into other curriculum areas.

Further research could be carried out which repeated this study but lengthened the time interval between pretest and posttest. A more appropriate time interval may be an entire school year or perhaps even two school years. A learning strategy is successful if it enables students to successfully analyze and solve new problems in both an academic and nonacademic setting. The strategy must be able to be generalized over many situations and over time (Deshler & Schumaker, 1986). Therefore, it would seem that to effectively teach students a strategy which enabled them to use the top level structure of a text to become better readers and writers would require more time than a day and a quarter of strategy instruction.

Further research could be carried out which repeated this study but instead of the students writing what they recalled from the reading passage, they would tape record what they recalled. Perhaps this would enable the students to better communicate the information they had recalled.

Further research could be carried out which repeated this study in various grade levels and various subject areas. Perhaps this type of strategy instruction is more suitable for older students. The maturity level of older students may enable these students to understand and internalize the top level reading and writings skills taught in this study more effectively. The older students may be more successful in recognizing the need for

improvement in their expository reading and writing skills and be more motivated to master the strategy. Research has shown that some secondary students are capable of using the top level structure of a text to become more efficient readers and writers (Meyer, Brandt & Bluth, 1980; Taylor, 1980). Also, the academic program in secondary schools focuses to a large extent on expository text, unlike the academic program in elementary schools. Secondary students are required to study subjects areas such as biology, chemistry, physics, world history, geography, etc... . Thus, a strategy which enables students to read and write expository text more efficiently becomes much more valuable to secondary students.

Yet, other research has shown that teachers who worked with junior students were able to build materials around organizing knowledge frameworks (Early, 1990). Thus, there is a need to further research the most effective method of teaching this strategy, and how this instructional method would differ depending upon the Grade which was being taught.

A longitudinal study would help discern whether the top level structure for reading and writing was being used by the students as they got older. Perhaps these students who did not seem to master the strategy during the study, had learned the strategy, but did not find it useful to them until a later date. The tests developed for each of the dependent measures may not have provided the students with a relevant and meaningful task in which to use the strategy. If this is true, the students would not have used

the strategy to complete the tests. Yet, during some real life situation when the students recognized a need to use the strategy (i.e., they were asked to summarize a note defining a particular concept), the students may have recalled the strategy and used it. This could only be determined if the students' progress were monitored over a much longer period of time.

The literature could be expanded upon by carrying out more research which links the top level strategy instruction to both reading and writing tasks. Research which investigates integrating reading and writing skill development needs to be further explored and developed to obtain an accurate evaluation of the effectiveness of this form of strategy instruction. For example, can the top level structure strategy be successfully taught to younger students? older students? Do students require a certain readiness level in their reading and writing skills for the strategy to be mastered effectively? What time frame for top level strategy instruction is the most effective? Would students in the elementary grades benefit from more exposure and skill development in the area of expository text? How could the method of strategy instruction be changed to become more effective?

Implications for Education

Research has indicated that a successful learner is one who possesses a variety of strategies and is able to use them to meet academic challenges (Pressley, Borkowski & Schneider, 1987). A learner who possesses capable

reading and writing skills is more likely to be a successful student because academic success is often based on a student's level of reading and writing competency. Research about the characteristics of effective readers and writers suggest an awareness and ability to use the top level structure of a text is important. Therefore, if a successful form of strategy instruction on the top level structure of a text can be developed, it would benefit all learners in the classroom. The possible implications for education could sway current educational practices in elementary and secondary grades across all curriculum areas.

One possible impliation is educators may want to recognize the value of traditional instruction. The method of instruction for both groups differed, but both groups improved over time. Thus, the most effective instructional approach may be a combination of the explicit strategy instruction and traditional instruction.

Strategy instruction which focused on the top level of a text could assist educators in addressing expository text to a much larger extent then presently occurring in today's school system. The knowledge frameworks offer a "do-able" and teachable approach. The strategy could be used and applied in several different ways, offering the flexibility necessary to be successfully applied in any classroom. For instance, young learners communicate their ideas through oral capabilities long before they are able to read print or express their ideas in print. Young learners have demonstrated

a knowledge base for both narrative stories and expository forms. An initial approach to teach top level structures to students, especially young students, is modeling through verbal discussions. The teacher verbalizes the structure behind the text. The verbalization will occur at the same time as the students are being immersed into the world of literature.

Westby (1985) outlines the importance of using talk about literature to bridge the transition from oral to print formats. Westby feels it is important to discuss, identify and pictorially symbolize the parts within narratives and expositions. For example, the teacher would discuss the important elements of the text and their sequence. These elements would be visually displayed. As adults, we recognize the presence of these elements and how they work together, but young children are often unaware of the structural elements.

As students progress through the school system, the knowledge frameworks could be presented verbally and visually to aid students in identifying the top levels structures of a text. The students would develop a strategy to which they could refer to become capable readers and writers.

For reading activities, the following suggested applications could be carried out: Once the article appropriate for the task had been chosen, and read, the students would try to determine the purpose of the text. The students would determine which knowledge framework best describes the article's purpose. Instead of answering questions about the text, the students could graph out the main ideas, supporting details and interrelating details

using the appropriate framework. Hence, the students have to move beyond the words in the text to the structure and purpose of the text. This movement should enable students to comprehend and recall information more effectively.

During writing activities involving discourse frameworks, the students would need to determine the purpose for writing and the appropriate knowledge framework. The students would outline and organize the main ideas and supporting details of their research using the framework. This extra step placed into the writing process would allow the students to determine the coherence and unity of their texts prior to writing. It would allow the students to organize in the prewriting stage and encourage students to compose using a word processor.

Elementary teachers in the primary and junior grades could use the top level frameworks to teach lessons on various topics. The students could present their research findings using the frameworks as an alternative to written paragraphs. This could greatly assist students who have difficulty expressing their ideas in the written form. Perhaps this approach would build their confidence and self-esteem to such an extent that an assigned writing task would no longer seem overwhelming.

The strategic approach could be utilized to assist students in note taking and studying for unit tests. If a learner is able to successfully complete a knowledge framework, he or she must understand the main ideas,

supporting details and the relationship between these ideas. However, when students are asked to answer a series of questions about a text, it does not necessitate comprehension of the passage as a whole. Thus, the students may have difficulty when asked to explain the ideas in the passage on a test, or when asked to apply the concepts independently at a later date.

Finally, strategy instruction focuses on teaching students how to implement skills and knowledge to meet the demands and challenges of both school and life outside of school. A successful learner is one who is able to effectively use strategies (Schuder, 1993). Therefore, even though the results of this study were not statistically significant, the strategy instruction approach is very valid. Perhaps modifications and adaptations to this study's approach made by other educators in the future would assist all educators in making their classroom a more effective learning environment.

Some suggestions for possible modifications or adaptations can be given. First, perhaps, the amount of modeling and thinking aloud should be increased to make the instruction more effective. Previous research suggested that teachers need to use mental modeling (scaffolding) and thinking aloud as part of strategy instruction. These instructional tools aid the teacher in teaching students why it is helpful to learn the strategy and when and where the strategy can be used (Gaskins & Elliot, 1991). The results of this study suggested the intermediate students were not able to use

the strategy effectively; maybe the students did not know when and where to use the strategy.

Possibly this form of strategy instruction would be more effective if taught in a language arts program, not in a geography program. A large amount of class time had to be devoted to covering content in the geography class. Also, as previously stated a large amount of class time was spent teaching mechanical skills (i.e., punctuation, grammar, etc...). However, effective strategy instruction must emphasis content knowledge, process knowledge and metacognitive knowledge. It is recommended that teachers who are introducing a strategy for the first time generally spend a greater amount of class time promoting students' awareness of the cognitive/metacognitive strategy (Gaskins & Elliot, 1991). Hence, it would seem as if a conflict over time management existed in the study. The teacher had to spend time teaching content and mechanic skills to meet the demands of the geography curriculum and the needs of the learners in the class, but this was valuable time which was not devoted to teaching metacognitive awareness. If the strategy had been taught during language arts classes, perhaps the teacher would have found more time to focus on teaching all three elements, content knowledge, process knowledge and metacognitive knowledge.

Another possible modification is to examine how individual teaching styles may make some educators better at delivering this form of strategy

instruction. The teacher's role during strategy instruction is to motivate students to take responsibility for their learning. Also, it is important for the teacher to share personal experiences of strategy use with the students (Gaskin & Elliot, 1991). Perhaps, some teachers are more comfortable with strategy instruction because it is how they learned. Other teachers may find it difficult to teach strategies because they are not intrinsically motivated to use strategies.

In closing, the explicit strategy instruction of the top level structure of a text is still considered to be a valuable learning tool in any classroom. Whether the students use the strategy immediately or apply the strategy successfully at a later date, the opportunity to become more efficient readers and writers is still worthwhile.

References

Avis, W., Gregg, R., Neufeldt, V., & Scargill, M. (1979). Canadian intermediate dictionary. Toronto: Gage Publishing.

Bos, C.S., & Anders, P.L. (1988). Developing higher level thinking skills through interactive teaching. Reading, Writing and Learning Disabilities, 4, 259-274.

Deshler, D.D. (1991). The strategies instructional model, searching, solving, succeeding, soaring. University of Kansas Institute for Research in Learning Disabilities.

Deshler, D.D., & Schumaker, J.B. (1986). Learning strategies: An instructional alternative for low-achieving adolescents. Exceptional Children, 52, 583-590.

El-Dinary, Brown and Van Meter. (in press). Strategies based instruction for writing in secondary classrooms. In E. Wood, V. Woloshyn & T. Willoughby (Eds.), Cognitive strategy instruction that really improves adolescents' learning. Brookline Books.

Early, M. (1990). From task to text: A case study of ESL students development of expository discourse. TESL TALK, 20, No. 1 111-124.

Englert, C., & Raphael, T. (1988). Constructing well formed prose: Process, structure and metacognitive knowledge. Exceptional Children, 54, 513-520.

Englert, C., Raphael, T., Fear, K., & Anderson, L. (1988). Students' metacognitive knowledge about how to write informational texts. Learning Disability Quarterly, 11, 18-46.

Fry, E. (1968, April). A readability formula that saves time. Journal of Reading.

Gaskins, I., & Elliot, T. (1991). Implementing cognitive strategy training across the school. The benchmark manual for teachers. Boston: Brookline Books.

Gates, A., & MacGinitie, W. (1992). Gates-MacGinitie Reading Tests. Toronto: Nelson Canada, Riverside Publishing Company.

Geva, E. (1983). Facilitating reading comprehension through flowcharting. Reading Research Quarterly, 18, 384-405.

Graham, S., & Harris, K.R. (1989). Improving learning disabled students' skills at composing essays: Self-instructional strategy training. Exceptional Children, 56, 201-214.

Hillocks, G. (1984). What works in teaching composition: A meta analysis of experimental studies. American Journal of Education, 93, 133-170.

Meyer, B.J.F., Brandt, D.H., & Bluth, G.J. (1980). Use of top level structure in text: Key for reading comprehension of ninth-Grade students. Reading Research Quarterly, 16, 72-103.

Mohan, B. (1986). Language and content. Reading, MA: Addison-Wesley.

Pressley, M., Borkowski, J., & Schneider, W. (1987). Cognitive strategies: Good strategy users coordinate metacognition and knowledge. Annuals of child development, 4, 89-129.

Pressley, M., Borkowski, J., & Schuder, T. & Almasi, J. (1992). Beyond direct explanation: transactional instruction of reading comprehension strategies. Elementary School Journal, 92, 513-555.

Pressley, M., & Associates (1990). Cognitive strategy instruction that really improves children's academic performance. Boston: Brookline Books.

Schuder, T. (1993). The genesis of transactional strategies instruction in a reading program for at-risk students. Elementary School Journal, 94, No. 2, 183-200.

Taylor, B.M. (1980). Children's memory for expository text after reading. Reading Research Quarterly, 15, 399-411.

Washington, V. (1988). Semantic mapping: A heuristic for helping learning disabled students write reports. Reading, Writing and Learning Disabilities, 4, 17-25.

Westby, C.E. (1985). Learning to talk-talking to learn: Oral-literate language differences. In C. Simon (ed.), Communication skills and classroom success. San Diego: College-Hill.

Appendix A.1: Parent Information Letter

September 26 1994

Dear Parent(s):

In the near future, a study will be conducted at Lyndwood Public School which will investigate whether students' reading and writing abilities can be improved by teaching students about the structure (organization) of a text. The purpose of this letter is to request your permission for your child's participation in the project. This project is also part of my Master thesis (M. Ed.) at Brock University.

The study will be conducted during the regular scheduled geography classes. The students will be studying cultural geography, with such topics as manufacturing, databasing, and immigration being studied. All students (whether involved in the study or not) will be covering the same topics and be responsible for the same unit tests, assignments and research projects. The difference will be some students will receive instruction about the organization of a text while others will participate in a more traditional learning approach. The length of the study will be approximately fifteen weeks.

In the past, the form of instruction this study will investigate has been found to improve students' reading and writing skills. I am particularly interested in confirming whether teaching students this form of instruction will improve students' reading and writing abilities. Thus one form of instruction will be used to teach two skill areas, reading and writing.

In general, students enjoy participating in these types of sessions. However, if for any reason a student indicates he or she does not wish to continue, the student will be removed from the study immediately. All of the data from the study will be stored anonymously in order to protect the privacy of students. The status of any student in the classroom will not be affected by his/her decision to participate in this study.

This study has been officially approved by the Peel Board of Education Research Advisory Committee and Brock University. When the study is complete, a report on the findings will be made available to parents. The students will be told about effective ways to improve their reading and writing skills.

Please return the attached consent form to the school as soon as possible indicating whether you give your permission for your child to participate in the study. Please note that it is important you return the form in either case. If you have any concerns about the study, please feel free to contact me at school (278-6144) or my thesis adviser, Dr. Vera Woloshyn, Ph. D. (905-688-5550 ext. 3340). Thank you.

Sincerely

Jean Marie Banks

Jean Marie Banks

Appendix A.2: Permission Form

Permission Form

Reading and Writing: The Effectiveness of Explicit Strategy Instruction on the Top Level Structure of a Text
Consent Form

Child's name: _____

Check here

_____ I give permission for my child to participate in the study, I understand that my child may receive instruction about the organization of a text and how to use this knowledge effectively, or a more traditional form of instruction.

_____ I do not give permission for my child to participate in the study. I understand this decision will not affect my child's status at school and my child will receive regular classroom instruction.

Signature of parent: _____

Date: _____

If you would like a complete summary of this study, please complete the form below:

Name: _____
Address: _____
_____
_____
_____

Appendix B: Peel Board of Education Ethics Approval Letter

PEEL BOARD OF EDUCATION

September 23, 1994

Jean Marie Banks
2662 Lundene Road
Mississauga, ON
L5J 3Z1

Dear Jean Marie,

The Peel External Research Screening Committee has reviewed and approved your Masters' research proposal "Reading and Writing: The Effectiveness of Explicit Strategy Instruction on Top Level Structure of a Text", to be conducted in the Peel Board of Education.

Although the study has been approved, the Committee requested that the consent form be re-written such that the language in the form is easily understandable to all parents. Please forward the updated consent form to my office at your earliest convenience.

I will inform the principal of Lyndwood Public School of the Screening Committee's approval of your project. Please be advised that the final approval for conducting your study must come from the principal of Lyndwood.

I have enclosed two copies of the Freedom of Information form and the Conditions for External Researchers form. Please sign one copy of each and return them to me.

Best wishes for successful completion of your project.

Sincerely,

Paul Favaro, Ph.D.
Chair, Peel External Research Screening Committee

PF:sc

Appendix C: Principal's Letter of Approval and Support

To Whom It May Concern:

As principal of Lyndwood Public School I am totally supportive of Jean Marie Bank's request to involve our school, more specifically the grade seven and eight students in a research study related to explicit strategy instruction on the top level structure of a text.

I understand the premise and the proposed method of data collection and find it acceptable from a school standpoint. I will willingly seek teachers and parental support related to the students involved.

Jean Marie is an extremely meticulous and professional educator. Knowing her as I do, she will complete this project well and with data that will be very interesting for our staff and community.

Sincerely,

B. Boyes
Principal

Appendix D.1: Reading Passage One - Pretest

Why the Whales Came Inshore

Every year the capelin fish swim inshore to spawn near the eastern coast of Newfoundland. Every year the codfish who feed on the capelin, follow them inshore. Every year the fisherman set their traps to catch the cod. However, in the late 1970's, there was a problem. Humpback whales were swimming inshore and getting caught in the codfish nets. The whales ruined the nets, and while the nets were being repaired the fishermen could not catch any fish. This meant they lost money. Since the killing of the humpback whales was banned, the fisherman could not solve the problem that way. One fisherman, John Lockyer from Bay de Verde, Newfoundland, said " The ban should be lifted and the whales killed; it's the only way to solve the problem...

But, what exactly had caused the problem? In the late 1970s many more humpback whales were sighted. Many Newfoundlanders believed that this meant the humpback whale population had increased dramatically. The whales were coming in closer to shore in search of food.

Before fisherman and the government could solve the problem it disappeared. Suddenly, the number of humpback whales decreased. They were no longer causing any problems. Many fisherman thought that the humpback whale population had decreased, but others weren't too sure.

Dr. Jim Carscadden, a capelin biologist with Fisheries and Oceans Canada at St. John's, and Hal Whitehead decided to investigate. Perhaps the capelin had something to do with the mystery surrounding the whale population.

Dr. Carscadden and Hal Whitehead discovered that humpback whales like to eat young capelin. But, there were very few capelin between 1974 and 1979. This meant that the whales had to eat the older capelin. When these capelin swam inshore to spawn, the whales followed. Now the scientists knew why the humpback whales were swimming inshore. But they still didn't know why there were so few young capelin during those years.

The number of capelin depends upon the weather. The capelin larvae need steady southwest winds during August and warm water temperatures for the rest of the year in order to survive. If the winds blow in the opposite direction, the larvae end up on the beach. They can't develop there. If the ocean is cold, the development of the larvae will be delayed. When Carscadden and Whitehead looked at the meteorological data for the years between 1974 and 1979, they found out the weather was very bad. Therefore, very few capelin had survived, and the whales had chased after the remaining capelin. Now, that scientists understand the relationship between the weather, the capelin and the humpback whales, they can warn the fisherman about bad years for whales.

adapted from Nature Canada
by Hal Whitehead

Appendix D.2: Unaided Retelling Sheet

Reading Test: Why the Whales Came Inshore

Instructions: After you have finished reading the passage, use the space below to write everything you can remember from the passage.

Appendix D.3: Fill-in-the-Blanks Sheet

Why the Whales Came Inshore

Now, answer the questions below about the passage.

1. The fishermen were having problems with the whales because the whales got caught in their _____.

2. The capelin swam inshore to _____, and were followed by the _____.

3. The number of capelin depended upon the _____.

4. The meteorological data for the years between 1974 and 1979 show the weather had been _____.

Appendix E.1: Reading Passage Two - Pretest

The Mystery of the Bermuda Triangle

The area of the Atlantic Ocean bounded by Bermuda, Florida and Puerto Rico is known as the Bermuda Triangle. Since 1900, more than one thousand people have disappeared in this area. In most cases, rescuers have not found any traces of the people, their ships, or their planes. Many people have nicknamed the triangle the "Graveyard of the Atlantic".

Quite a few people believe there is some mystery surrounding the triangle. Others do not believe there is any mystery at all. These sceptics think the disappearances are a result of inexperienced sailors and pilots, faulty equipment, violent storms and a strong undercurrent. In 1977, a special team of researchers from the United States and the Soviet Union decided to investigate the triangle. The researchers wanted to find out if the disappearances were based on something supernatural or it they could be explained by scientific fact. After one year of investigating the triangle, the Soviet and American scientists found out two things. They observed "whirlwinds" which increase the water speed, occur frequently in the Bermuda Triangle. The second conclusion, made by the Soviets, was that there is "nothing supernatural" about the triangle.

Then how can all the strange happenings in the triangle be explained? For example, in 1971, two American air force pilots were in a routine flying mission that took their plane through the Bermuda triangle. Air traffic controllers were tracking the plane on a radar screen when it suddenly disappeared. Rescue jets were immediately sent to the area, 136 km southeast of Miami, Florida where the plane had disappeared. Although the weather was perfect, the water clear and not very deep, the rescuers could find no trace of the plane or the crew. What had happened? The air force rescue team searched over a 16 000 km2 area, and still they could not find anything. To this day, no one knows what happened to the ill-fated plane and its crew.

(Adapted from "Has The Triangle struck again" by Bill Walker, Toronto Star)

Appendix E.2: Unaided Retelling Sheet

The Mystery of the Bermuda Triangle

Instructions: After you have finished reading the passage, use the space below to write everything you can remember from the passage.

Appendix E.3: Fill-in-the-Blanks Sheet

The Mystery of the Bermuda Triangle

Now, answer the questions below about the passage.

1. Many people have nicknamed the triangle the _____.
   since more than one thousand people have _____ in this area.

2. Sceptics think the disappearances are a result of _____.

3. Whirlwinds are _____.

4. On the day in 1971 when two American air force pilots went missing, the weather conditions were _____.

Appendix F.1: Reading Passage One - Posttest

The Boro: Shifting Cultivators

The Boro live in the rain forest. Their rain forest is located in the Amazon basin close to where the borders of Brazil, Colombia and Peru meet. The Boro grow some crops to survive. The crops cannot provide them with all the food they need, so they must hunt and gather to fill out their diet.

You can imagine how difficult it would be to clear a patch of the rain forest to plant crops. Trees that are up to 60m high are very difficult to cut down. The Boro cannot cut down trees because they do not have saws or axes. In fact, the Boro have no metal tools at all. They must use stone wedges to cut into the trees. They can't cut through the trees with these stone "axes". But, they can kill the tree by slashing the bark around its circumference. The dead tree is left to dry out. Later, it is burned and the ashes are used to fertilize the soil.

Once they have removed the trees, the Boro plant their crops between the tree stumps. The hot, wet weather helps the crops grow quickly. Their main crops are manioc, yams, sweet potatoes and beans.

Meat in the Boro diet is provided by hunting for birds, wild pigs, monkeys, anteaters and by catching fish. Therefore, even though the Boro can grow crops, they must continue to hunt and fish. They also gather nuts, berries, and other fruits from the plants.

We call the Boro "shifting cultivators" because they move every four to five years. The reason is that once the trees have been cleared, the heavy rains fall directly on the soil. This rainwater drains through the soil carrying minerals from the soil with it. Minerals provide food for the crops. When it is moved down to lower levels in the soil, it becomes less useful to the crops. After four or five years it is so low in the soil layer, that crops will no longer grow. The Boro must then move on and find a new area of the forest to clear and plant their crops.

The Boro have followed this pattern of the shifting cultivators for hundreds of years. There have always been new areas of the forest for them to move to. Today, however, the forests are being cleared to build new cities, highways and large modern farms. This means the Boro have fewer areas to move to. They must remain on the same piece of land for a longer period of time. This means that they will not be able to grow as much food and may face starvation.

(adapted from The World around You, Physical Environment)

Appendix F.2: Unaided Retelling Sheet

Reading Test: The Boro

Instructions: After you have finished reading the passage, use the space below to write everything you can remember from the passage.

Appendix F.3: Fill-in-the-Blanks Sheet

The Boros

Now, answer the questions below about the passage.

1. The Boro are called _____ because they move every four to five years.

2. The Boros clear the rainforest by using an _____ to slash the _____ _____.

3. The Boros _____ the trees and use the ashes to _____ the soil.

Appendix G.1: Reading Passage Two - Posttest

Band Aid Helps African Nation

In 1984, the world became aware of the famine that existed in Ethiopia. One British musician, Bob Geldof, was horrified by what he heard and saw. He formed a band of British rock musicians who wrote a song entitled "Do they know its Christmas?" The band was called Band Aid. They also made a video. All the proceeds were put into a fund for famine relief.

Musicians in Canada formed a group, called Northern Lights for Africa, and recorded a song called " Tears are not enough". Musicians from the United States also organized a group called USA for Africa. Their song was called " We are the world."

In July 1985, all these musicians gave a huge concert called Live Aid. It was held simultaneously in London, England and Philadelphia, Pennsylvania. The performances were hooked up by satellite. so, concert-goers in England could watch the performers in Philadelphia on a huge television screen and vice versa.

The concert, records and videos raised about $140 million. About 65 million was spend on emergency relief. The rest of the money is earmarked for long term projects.

Band Aid organizers are spending the money on small scale projects that will help people to develop their skills. They have spend some of the money to help farmers in Sudan; a women's co-op in Mali; a tree planting scheme in the Sahel region; brick making in Timbuktu; and beekeeping in Sudan.

Band Aid organizers have a team of American and British experts who review all the requests for aid, but all final decisions rest with all organizers. For example, one veterinary drug company requested $3 million to buy its own products!

(Adapted from " Band Aid's million steer course for future," Toronto Star, June 1986)

Appendix G.2: Unaided Retelling Sheet

Reading Test: Band Aid Helps African Nation

Instructions: After you have finished reading the passage, use the space below to write everything you can remember from the passage.

Appendix G.3: Fill-in-the-Blanks Sheet

Band Aid Helps African Nation

Now, answer the questions below about the passage.

1. All proceeds from the record entitled " Do they know its Christmas?" were donated to _____.

2. The song produced by the Canadian musicians was titled _____.

3. An example of a small scale project developed to help the people in Ethiopia is _____.

4. A total of _____ million dollars was raised, and sixty five million was spend on _____.

Appendix H: Expository Writing Topics (Pretest and Posttest)

Expository Writing Topics - Pre/Post Test

Pretest students complete both Question One and Two

1. Several decades ago, it was felt men and women should follow a traditional set of roles in their relationship together. The men would be the breadwinner, and husband. The women would be the caregiver, homemaker and wife. Today, men and women are much more likely to share the responsibilities more equally, with either person being able to fulfill any tasks which are required. Write about three to four paragraphs which explain how you feel about this change and what you feel your future will hold for you in regards to this issue.
2. Many people feel professional athletes and musicians earn too much money for the job they do. These people feel their contributions to society do not deserve earning millions of dollars each year. Write about three to four paragraphs which explain your opinion on this matter and any possible solutions you may have to this issue.

Post-Test - student complete Questions Three and Four

3. Recently, many people in Canada have been concerned over whether or not the province of Quebec will choose to separate from the rest of Canada. Write about three to four paragraphs which explains your opinions on this issue and any possible solutions you may have to this issue.
4. You have been appointed to a student advisory committee whose role is to prepare a report on how the intermediate students feel your school could be improved. Write an essay three to four paragraphs which explain and describe how you feel the school could be improved and what role the intermediate students will take in improving the school. Remember your work is being marked so avoid ranting.

Appendix I: Writing Evaluation Scale

Writing Evaluation Scale

Assignment_____ Date_____
Marker 1: _____
Marker 2:_____

Instructions: After reading the assignment, circle the appropriate number. Four is the highest. If you wish to praise some aspect of the writing not included in the categories, or make suggestions, use the COMMENT section.

Categories:

I. Focus on Topic: 5. ideas relate to topic and are fully developed
4 - ideas relate to topic
3 - fluctuation but focus is on topic
2 - deviates from topic
1- insufficient evidence

II. Organization: 5- overall organization, intro/body/conclusion/ well organized
4- well organized and coherent paragraphs, topic clearly identified
3- usually conveys ideas smoothly
2- coherence weak
1- insufficient evidence

III. Introduction:5- introduction commands attention and is well organized
4- introduction commands attention
3- introduction satisfactory
2- introduction unsatisfactory
1- insufficient evidence

IV. Conclusion: 5- conclusion commands attention and sums up thoughts
4- conclusion commands attention
3- conclusion satisfactory
2- conclusion insatisfactory
1- insufficient evidence

V. Prewriting Organization: 5- evidence of careful planning and organization of ideas
4- thought out and planned
3- satisfactory plan
2- little evidence of planning
1- insufficient evidence

Numerical Score
Total ____
25

COMMENTS:_____

Appendix J: Review of Gates-MacGinitie Reading Test

Review of Gates-MacGinitie Reading Tests: Survey D, E and F (Grades 4-12)

Speed and Accuracy Test

Each test contains 36 three-line paragraphs, each of which is either incomplete or ends with a question. A student has to pick from four distractors the best word to complete the paragraph or to answer the questions. In survey D the students are allowed 6 minutes for this test; in Survey E and F, 4 minutes are allowed. This test seems to assume that when one talks of speed in reading one is only talking about fast speed. This test furthermore links fast speed of reading with accuracy. The test does not acknowledge the fact that efficient readers read at a variety of rates, depending upon the kinds of material with which they are presented. The test does not acknowledge, either, the fact that different individuals attain the same levels of accuracy using different speeds of reading. The test appears to suggest that "faster is better."

Vocabulary Test

There are 50 questions in each form. Each question consists of a stimulus word and 5 distractors from which the student is to pick the word which means most nearly the same as the stimulus word. Such items may be useful in the classroom as a teaching and learning device, but in a test they are at best hit-and-miss devices. Students' inability to answer any given item correctly may indicate that they did not understand the stimulus word or that they did not understand the distractor items, or that they personally saw a stronger relationship between one of the other words and the stimulus word. In all of these items students are denied the use of any context.

Comprehension Test

In all the test booklets this section consists of short paragraphs which contain 2 or 3 clozes. Each cloze blank is numbered and beneath the paragraph appear the multiple choice items for each blank. There are 5 distractors in each item. This type of test is one of the tests available for evaluating how a student reads. In order to complete a cloze a student must exercise all of those skills which together make up a good reader. It is unfortunate that this part of the test appears in the same booklet as the Speed and Accuracy and Vocabulary tests, and that the results of this test will be combined with the other two tests to give a single score. If teachers were to administer the Comprehension section of this test on its own, they could obtain some useful information about the abilities of their students in reading.

Appendix K: Student Self-Evaluation Sheet for Reading

Student Self-Evaluation for Reading Skills

The purpose of this activity to find out how you generally feel about reading. **Please circle the number that best describes how you feel about reading.**

1. Do you clearly understand the purpose for which you are reading?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

2. Do you focus your attention on the purpose for which you are reading?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

3. Do you make sure that you understand the meaning of key words?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

4. Do you make sure that you understand the meaning of key phrases?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

5. Can you identify the main ideas in the passage?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

6. Can you identify the supporting details in the passage?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

Answer Questions Seven and Eight in the space provided.

7. How do you read? _____
_____
_____

8. What are you thinking about in your head as you read? _____
_____
_____

Appendix L: Student Self-Evaluation for Writing

Student Self-Evaluation for Writing Skills

The purpose of this activity is to find out how you generally feel about writing.
Please circle the number that best describes how you feel about writing.

1. Do you clearly understand the purpose for which you are writing?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

2. Do you focus your attention on the purpose for which you are writing?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

3. Do you identify the main ideas in your passage?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

4. Do you identify the supporting details in your passage?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

5. Do you organize the main ideas in your passage?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

6. Do you organize your ideas before you start writing?

Never	Rarely	Don't know	Sometimes	Often
1	2	3	4	5

Answer Questions Seven and Eight in the space provided.

7. How do you write?

8. What are you thinking about in your head as you write?